

# SCARAB MAVEN 65

SKID MOUNTED ROAD SWEEPER

FAYAT



Parts Book



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## Maven 65 Parts Book

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## Important Notice To Users

This manual is published by the Technical Publications Department of Scarab Sweepers Limited and every effort is made to ensure that the information it contains is correct at the time of publication. Due to a policy of continuous development, however, the Company reserves the right to alter the specification and to supply when so altered without reference to illustrations and descriptions in this manual.

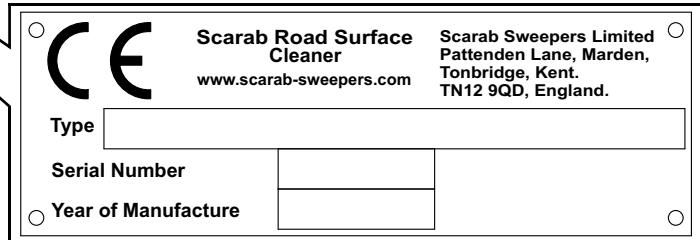
Parts depicted or mentioned in this manual may or may not be fitted to your particular road sweeper due to various options that may or may not have been selected and does not therefore infer that the part should be fitted to your particular road sweeper or is missing. If in doubt then please contact the Scarab Parts Department for clarification.

It is imperative that the correct model is FULLY identified when procuring replacement parts for your Scarab Sweeper. To avoid unnecessary confusion and delays caused by incorrectly ordered parts, please refer to the Vehicle Serial Number (CE) Plate and take note of the vehicle's number.



 The Serial Number Plate is located on the left hand side of the subframe, below the engine frame door.

The example shown here is for guidance only.



This information MUST accompany EVERY parts order to help ensure that the correct parts are supplied.

## Introduction

This parts book has been organised to facilitate ease of use when identifying and procuring replacement parts for the Scarab Sweeper.

The information content has been arranged in a logical manner by creating a number of separate sections, each dealing with a specific aspect or sub-system of the machine, complete with its own table of contents. Where relevant, cross-references from one section to another have been included to enable the user to quickly navigate to the information that gives the required level of detail.

 Please note that the illustrations in this book are for identifying parts and is not indicative of assembly order.

## Using the Parts Lists

The parts lists in this parts book are accompanied by an illustration. The breakdown structure within each parts list reflects the inter-relationship of the various components in an assembly.

They list the item, its part number, quantity and description and a page number (¶) if this part is cross referenced elsewhere in his manual. See *Figure 1*.

This parts book covers both 12volt and 24volt systems. Lines in Orange are for 12V systems only and lines in Green are for 24V systems only. Blue and white lines are for both systems. See *Figure 1*.

| Item | Part No | Qty | Description  | ¶ |
|------|---------|-----|--|---|
| ①    | 044491  | 1   | Hopper control valve, 12V, includes items ③, ④ and ⑥ |   |
| ②    | 039703  | 1   | Hopper control valve, 24V, includes items ③, ⑤ and ⑥ |   |
| ③    | 039746  | 2   | Solenoid valve                                       |   |
| ④    | 041225  | 4   | Coil, 12V / 17.2 WATTS-ELZ                           |   |
| ⑤    | 039747  | 4   | Coil, 24V with diode                                 |   |
| ⑥    | 039748  | 2   | Coil spacer  |   |
| ⑦    | 035242  | 2   | Port plug $\frac{3}{8}$ " BSP                        |   |
| ⑧    | 011153  | 6   | Dowty seal $\frac{3}{8}$ " BSP                       |   |

Figure 1: Example of a parts list

## Item Numbers (Item)

Item numbers are used to cross-refer items from the parts lists to their associated illustrations and vice-versa, except for, attaching parts.

If the illustration of an item is superfluous or not illustrated, then the item number will be listed as not illustrated:- NI.

## Part Numbers (Part No)

Not every item will have a part number associated with it because it might be an assembly that is broken down into its components elsewhere or there might be different versions of that item described elsewhere.

If a part number is marked as TBC then this means **to be confirmed**. Please contact Scarab Part Department.

## Quantities (Qty)

When a parts quantity has been marked with As Req then this means **as required**, for example hose lengths may differ slightly due to the route taken, or you may have one or more of a given part then the quantity will be **as required** due to the quantity of said part that is fitted to a particular sweeper configuration.

## Description

A brief description of the part to further help with identification.

## Page (¶)

Use the number in this column to go to that page to get more information regarding this item/part.

## PDF Version

Includes bookmarks to each chapter and links to other sections from components that are also referenced elsewhere to make navigation throughout the manual easier. For example click a number in the Page (¶) column and it will take you to that page, or click an item in the table of contents to be taken to that page.

## **Warranty Statement**

1. Scarab Sweepers Limited (hereinafter referred to as the Company) warrants that (subject to the other provisions of the published Terms and Conditions of Sale - available upon request) upon delivery and for a period of 12 months from the date of actual delivery, or 2,000 running hours from the date of actual delivery whichever is sooner, the Goods correspond with their specification at the time of delivery, and will be free from defects in materials and workmanship.
2. The Company does not warrant the condition or quality of any used Goods supplied to the Customer, or other truck manufacturers' chassis cab content or to the auxiliary engine fitted in the Scarab Sweeper or to any other component not manufactured by the Company and any such warranty claims must be submitted to the manufacturer of that component, or their locally appointed agent.
3. The Company shall not be liable for a breach of any of the warranties in condition 1 unless the Customer gives written notice of the defect to the Company, and (if the defect is as a result of damage in transit) to the carrier, within 7 days of the time when the Customer discovers or ought to have discovered the defect.
4. The Company shall not be liable for a breach of any of the warranties in condition 1 if the Customer makes any further use of such Goods after giving such notice, the defect arises because the Customer failed to follow the Company's oral or written instructions as to the storage, installation, commissioning, use or maintenance of the Goods or (if there are none) good trade practice, or the Customer alters or repairs such Goods without the written consent of the Company, or uses non genuine parts to effect a repair.
5. The following consumable items listed are excluded from the Company warranty:

all fuel oils,  
antifreeze,  
all brush link pivots and bushes,  
wander hoses, suction nozzles,  
body inlet ducts, wearing plates,  
high pressure water pump piston seals and valves,  
door seals,  
inlet seals,  
batteries,  
tyres,  
all brushes,  
lift cables,  
rubber skirts,  
suction nozzle wheels,  
flap trunking,  
deflectors,  
screens flaps or blanking plates,  
water pump diaphragm valves and water jets,  
all filter strainers and elements,  
windows,  
glass mirrors,  
light bulbs,  
fuses,  
brake lining pads,  
auxiliary drive belts and any other part normally regarded as consumable.

6. Any parts replaced under the terms of this warranty will be covered by the unexpired portion of this warranty.
7. Subject to conditions 3 and 4, if any of the Goods do not conform with any of the warranties in condition 1 the Company shall at its option repair or replace such Goods (or the defective part) or refund the price of such Goods at the pro rata Contract rate provided that, if the Company so requests, the Customer shall, at the Customer's expense, remove the defective Goods or part of such Goods and return the Goods or the part of such Goods which is defective to the Company. Parts replaced under warranty will be delivered by the Company FOB port of exportation.
8. If the Company complies with the terms contained in this statement it shall have no further liability for a breach of any of the warranties in condition 1 in respect of such Goods.
9. No representative or agent of Scarab Sweepers Limited has the authority to add or to vary these Warranty Conditions except with the Company's official confirmation in writing from Scarab Sweepers Limited, head office in Marden Kent, England.

For further information, please refer to the Company's Terms & Conditions of Sale. In the event of conflict between this Warranty Statement and the Company's Terms & Conditions of Sale the latter will prevail.

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# Sweeping

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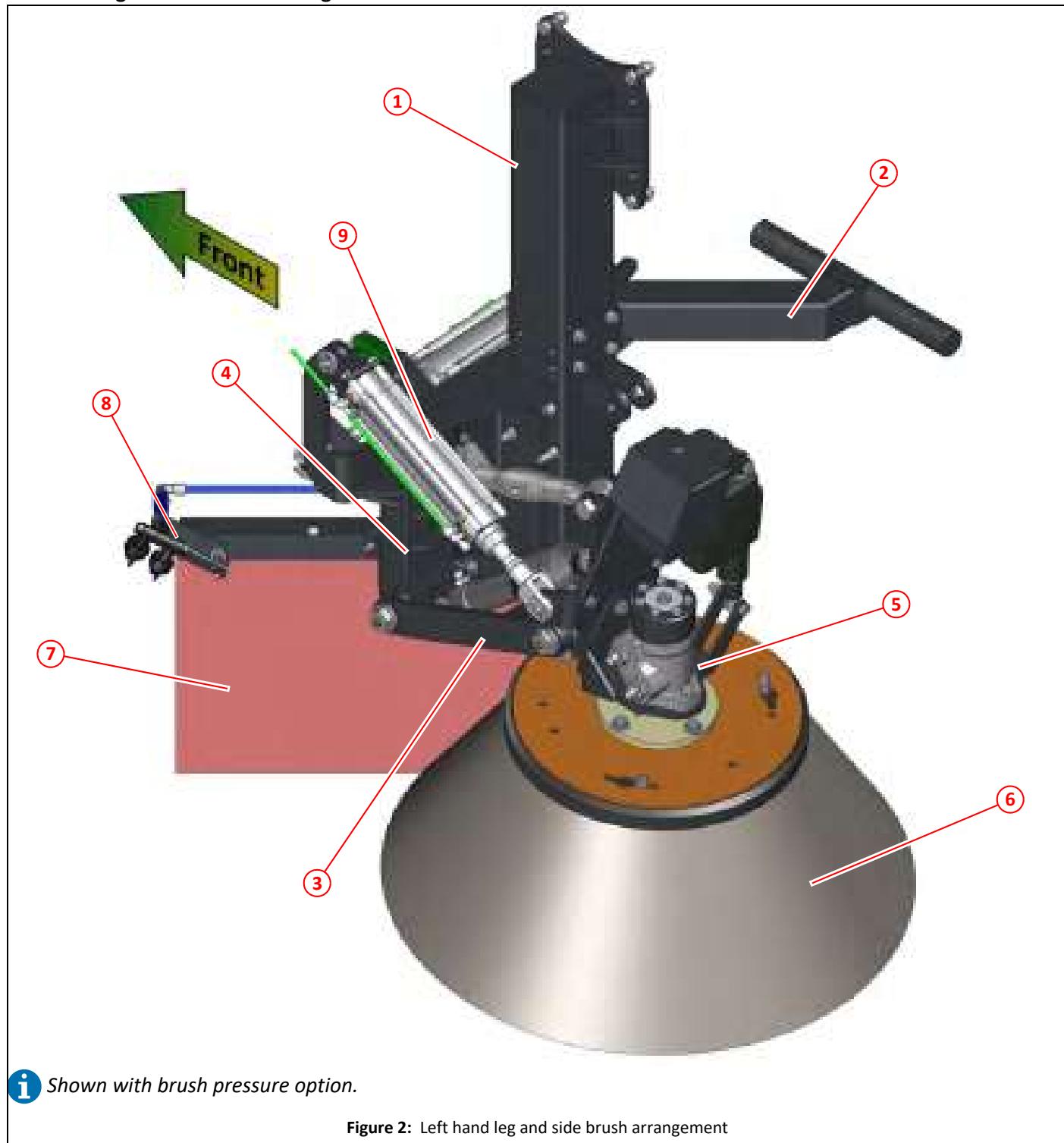
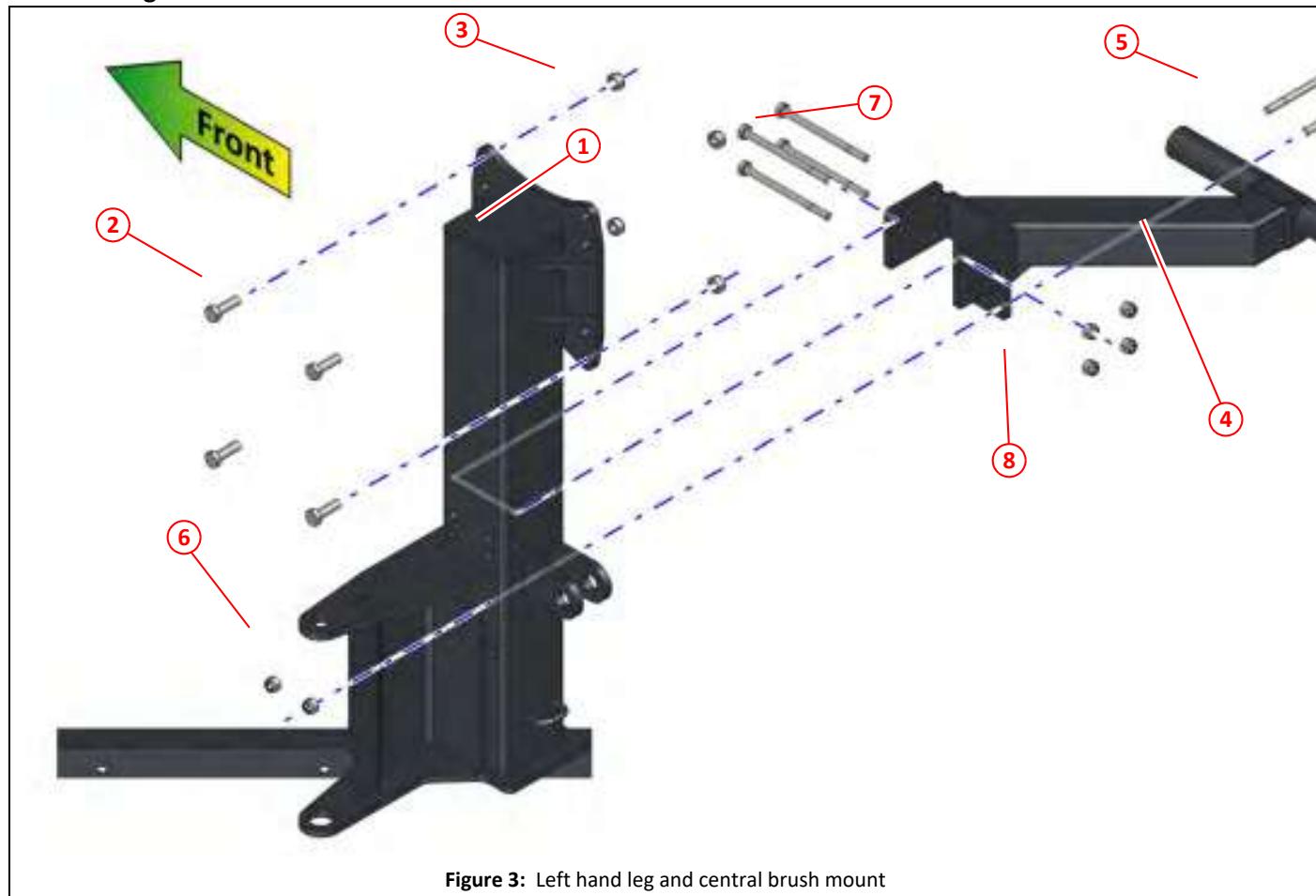
**Left hand leg and side brush arrangement**


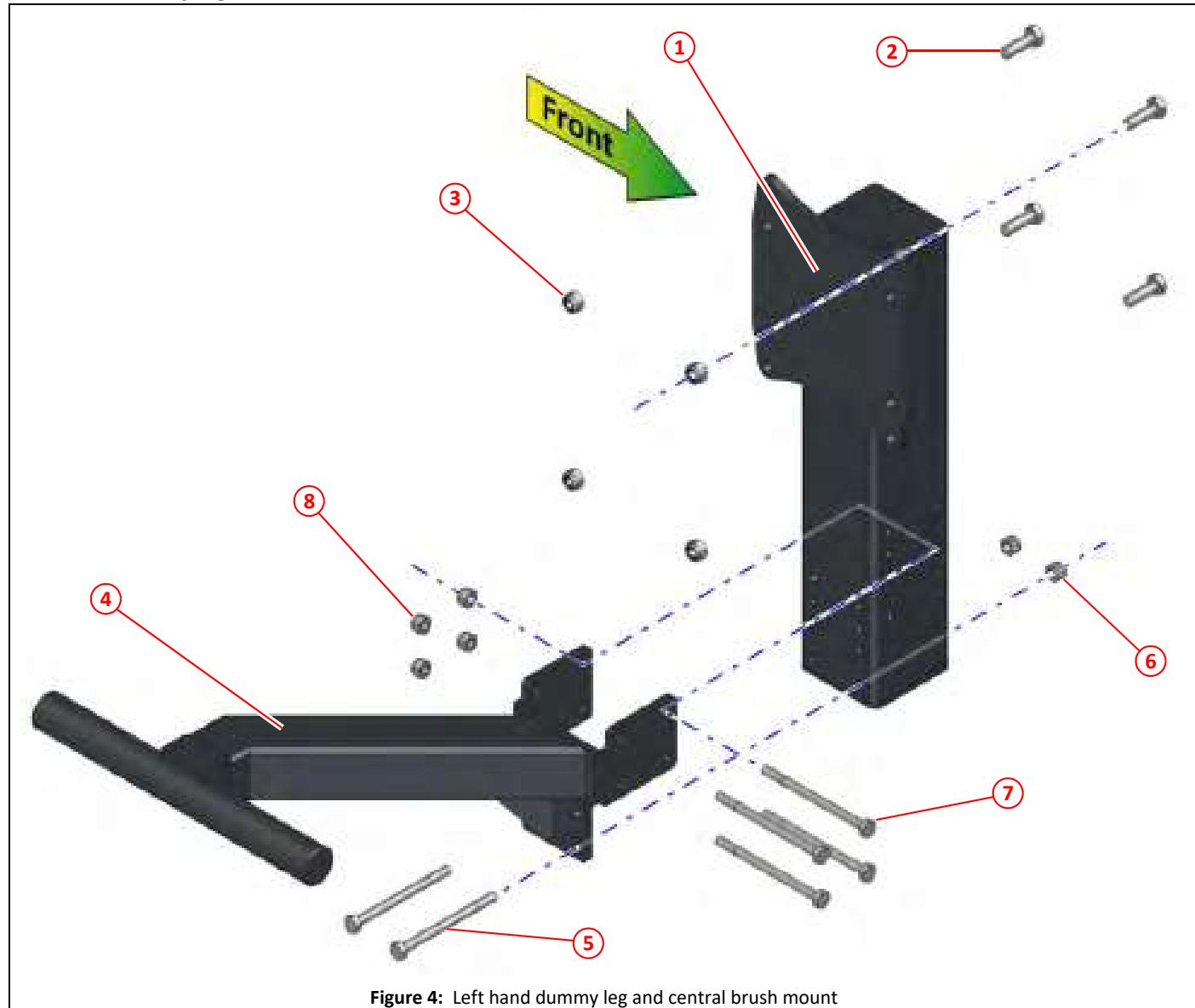
Figure 2: Left hand leg and side brush arrangement

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 046841  | 1   | Left hand leg  |
| ②    | 034334  | 1   | Left hand central brush (wide sweep) adjustable mount    |
| ③    |         |     | Left hand side brush raise/lower assembly                |
| ④    |         |     | Left hand side brush king post, swing in/out arrangement |
| ⑤    |         |     | Side brush motor assembly                                |
| ⑥    |         |     | Side brushes   |
| ⑦    |         |     | Front skirt, side brush                                  |
| ⑧    |         |     | Side brush dual water spray                              |
| ⑨    |         |     | Side brush pressure cylinder (option)                    |

## Left hand leg and central brush mount

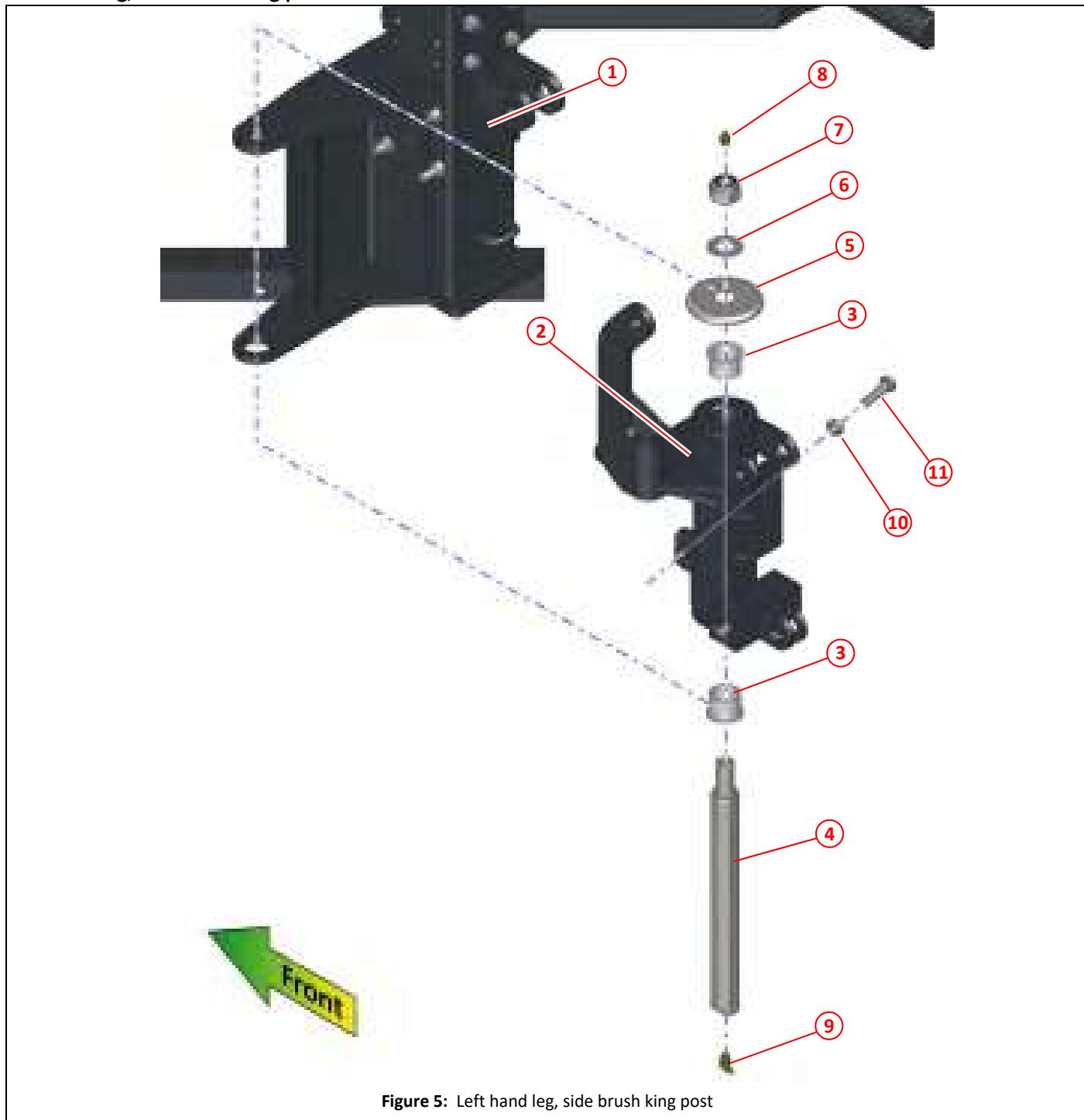


| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 046841  | 1   | Left hand leg   |
| ②    | 011053  | 4   | Set screw M12 x 35                                    |
| ③    | 011077  | 4   | Nyloc nut M12   |
| ④    | 034334  | 1   | Left hand central brush (wide sweep) adjustable mount |
| ⑤    | 011407  | 2   | Bolt M10 x 120  |
| ⑥    | 011075  | 2   | Nyloc nut M10   |
| ⑦    | 000075  | 4   | Bolt M10 x 130  |
| ⑧    | 011075  | 4   | Nyloc nut M10   |

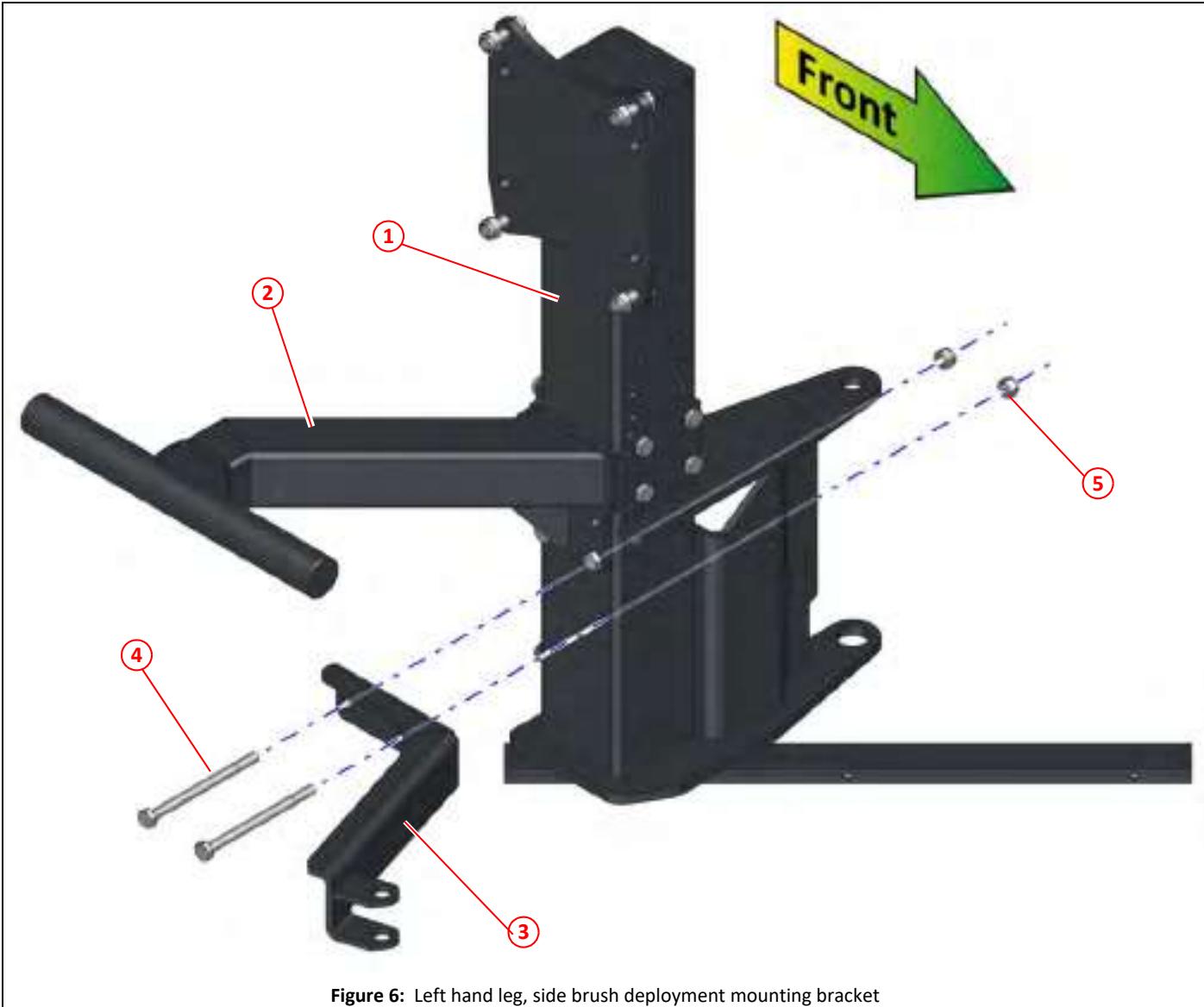
**Left hand dummy leg and central brush mount**


| Item | Part No | Qty | Description   | File |
|------|---------|-----|---|------|
| ①    | 042867  | 1   | Dummy leg   |      |
| ②    | 011053  | 4   | Set screw M12 x 35                                    |      |
| ③    | 011077  | 4   | Nyloc nut M12   |      |
| ④    | 034334  | 1   | Left hand central brush (wide sweep) adjustable mount |      |
| ⑤    | 011407  | 2   | Bolt M10 x 120  |      |
| ⑥    | 011075  | 2   | Nyloc nut M10   |      |
| ⑦    | 000075  | 4   | Bolt M10 x 130  |      |
| ⑧    | 011075  | 4   | Nyloc nut M10   |      |

## Left hand leg, side brush king post



| Item | Part No | Qty | Description                                      |
|------|---------|-----|--|
| ①    | 046841  | 1   | Left hand leg                                    |
| ②    | 047024  | 1   | King post, left hand side brush                  |
| ③    | 013012  | 2   | Bush, king post                                  |
| ④    | 013007  | 1   | Kin pin  |
| ⑤    | 013013  | 1   | Dirt shield                                      |
| ⑥    | 011102  | 1   | Washer M20                                       |
| ⑦    | 011082  | 2   | Nyloc nut M20                                    |
| ⑧    | 010903  | 1   | Grease nipple, straight, $\frac{1}{8}$ " BSP     |
| ⑨    | 011060  | 1   | Grease nipple, $135^\circ$ , $\frac{1}{8}$ " BSP |
| ⑩    | 011074  | 1   | Full nut M10                                     |
| ⑪    | 011034  | 1   | Setscrew M10 x 40                                |

**Left hand leg, side brush deployment mounting bracket**


| Item | Part No | Qty | Description   | File |
|------|---------|-----|---|------|
| ①    | 046841  | 1   | Left hand leg   |      |
| ②    | 034334  | 1   | Left hand central brush (wide sweep) adjustable mount |      |
| ③    | 047065  | 1   | Left hand side brush deployment ram mounting bracket  |      |
| ④    | 000075  | 1   | Bolt M10 x 130  |      |
| ⑤    | 011075  | 2   | Nyloc nut M10   |      |
| ⑥    | 011073  | 3   | Nyloc nut M8  |      |

## Left hand, side brush swing in/out ram arrangement

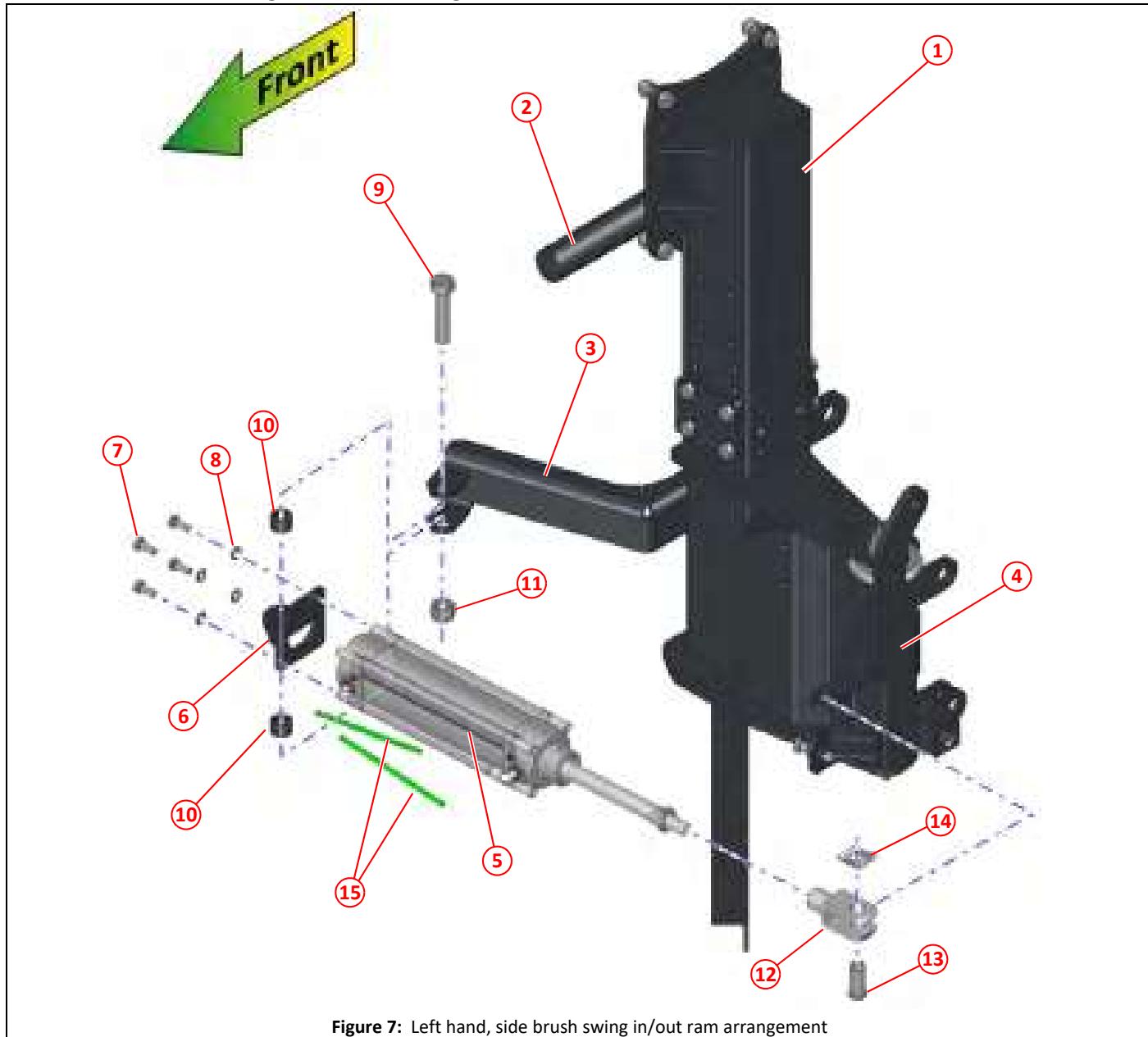
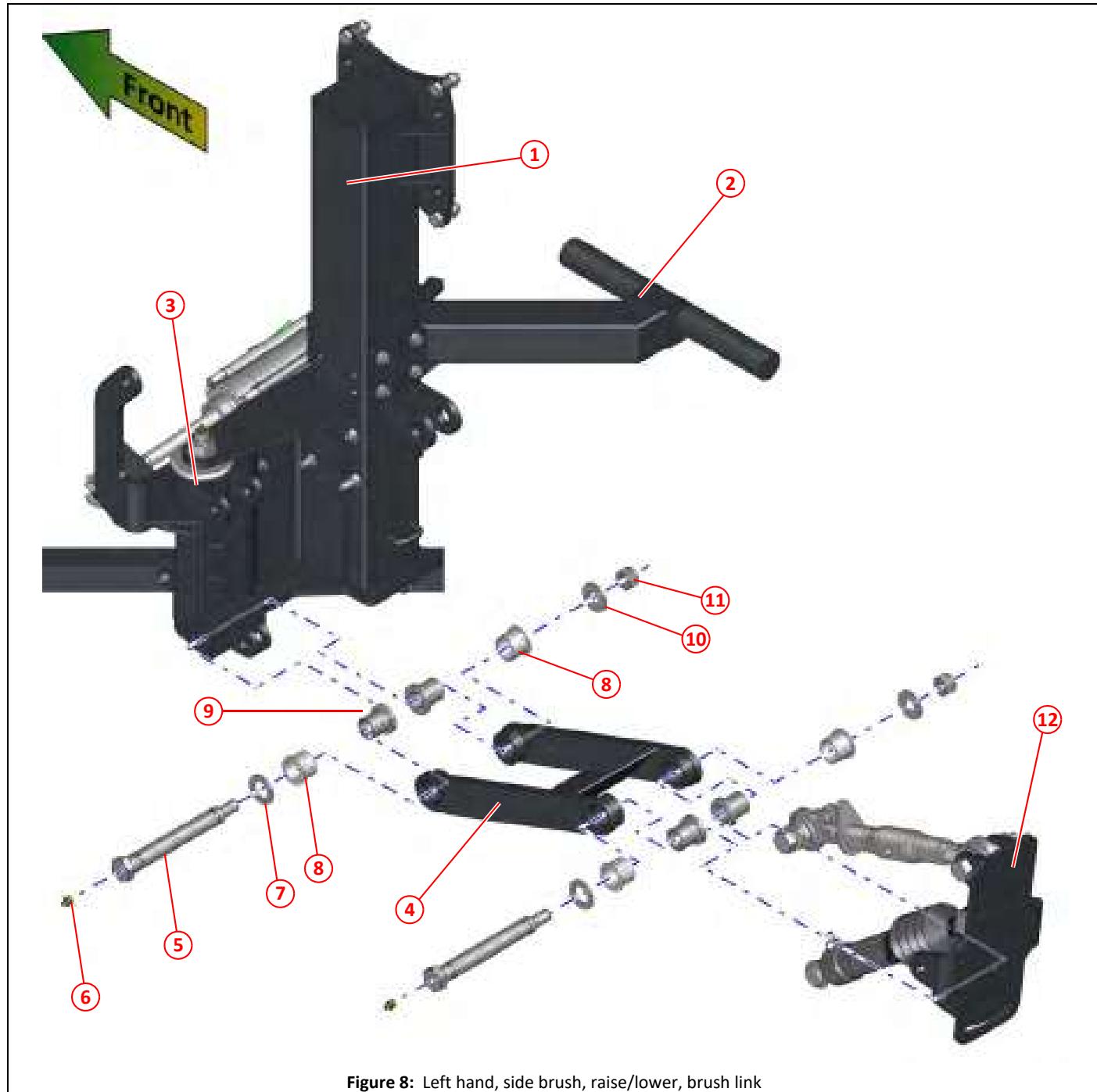


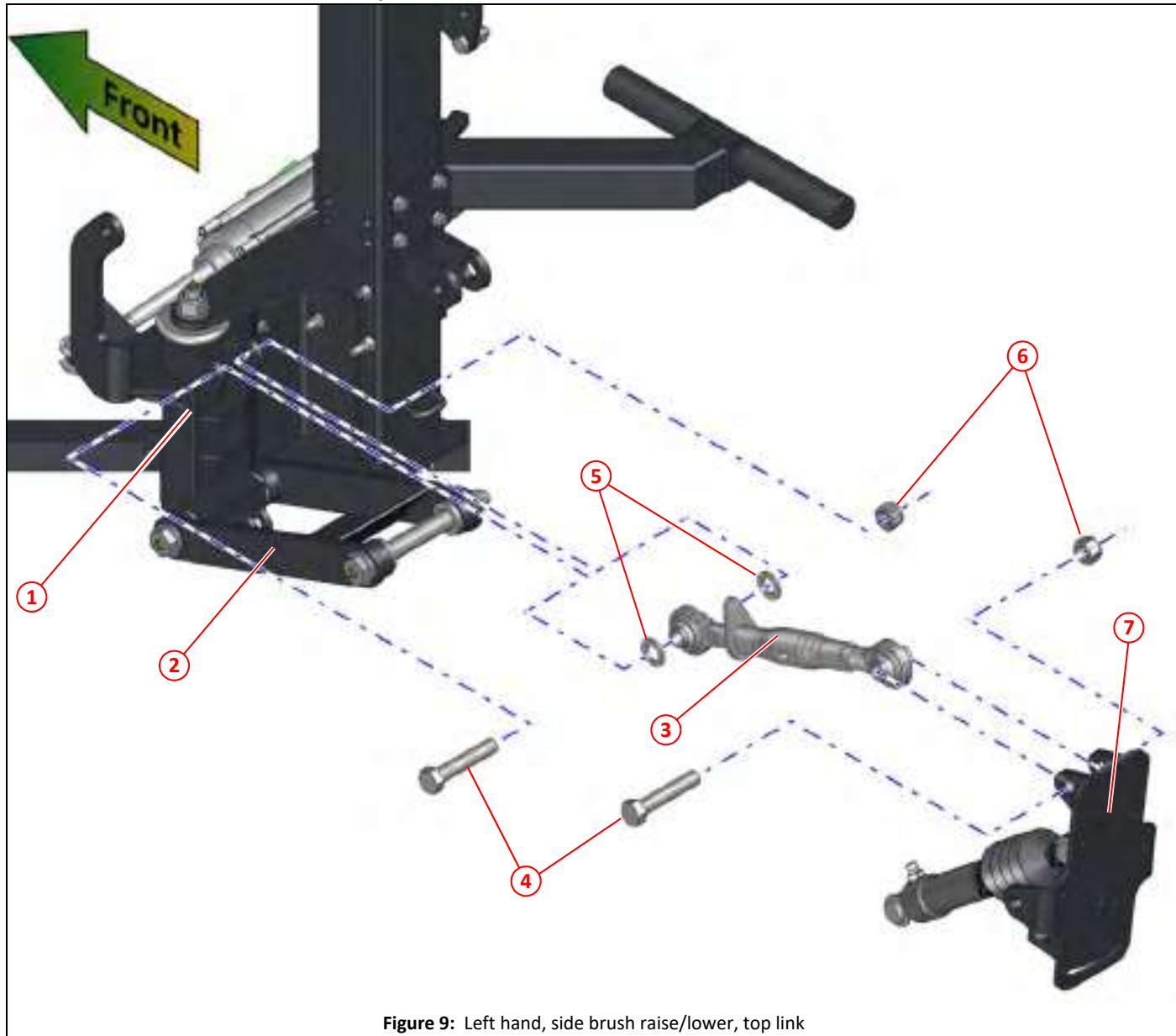
Figure 7: Left hand, side brush swing in/out ram arrangement

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 046841  | 1   | Left hand leg   |
| ②    | 034334  | 1   | Left hand central brush (wide sweep) adjustable mount |
| ③    | 047065  | 1   | Left hand side brush deployment ram mounting bracket  |
| ④    | 047024  | 1   | King post, left hand side brush                       |
| ⑤    | 028306  | 1   | Pneumatic cylinder ø63 x 160                          |
| ⑥    | 031052  | 1   | Ram end ø63   |
| ⑦    | 011010  | 4   | Set screw M8 x 20                                     |
| ⑧    | 011093  | 4   | Spring washer M8                                      |
| ⑨    | 011260  | 1   | Bolt, M16 x 70  |
| ⑩    | 011000  | 2   | Hose $\frac{5}{8}$ ", fuel, SAE100R6, cut to 15mm     |
| ⑪    | 011060  | 1   | Nyloc nut T M16                                       |
| ⑫    | 020299  | 1   | Clevis, pneumatic, M16 x 1.5                          |
| ⑬    | 022673  | 1   | Clevis pin (turned)                                   |
| ⑭    | 022674  | 1   | Retaining clip M16                                    |
| ⑮    | 024650  | 2   | 6mm green air pipe, length as required                |

**Left hand, side brush, raise/lower, brush link**


| Item | Part No | Qty | Description   |  |
|------|---------|-----|---|--|
| ①    | 046841  | 1   | Left hand leg   |  |
| ②    | 034334  | 1   | Left hand central brush (wide sweep) adjustable mount |  |
| ③    | 047024  | 1   | King post, left hand side brush                       |  |
| ④    | 014801  | 1   | Brush link, side brush                                |  |
| ⑤    | 014796  | 2   | Pivot bolt, brush link                                |  |
| ⑥    | 010903  | 2   | Grease nipple $\frac{1}{8}$ " BSP, straight           |  |
| ⑦    | 014798  | 2   | Washer 24 x 40 x 3                                    |  |
| ⑧    | 013012  | 4   | Bush  |  |
| ⑨    | 014799  | 4   | Spacer sleeve, brush link                             |  |
| ⑩    | 014797  | 1   | Washer 17 x 4 x 3                                     |  |
| ⑪    | 011060  | 1   | Nyloc nut T M16                                       |  |
| ⑫    | 046284  | 1   | Swivel plate, side brush                              |  |

## Left hand, side brush raise/lower, top link



| Item | Part No | Qty | Description                       |
|------|---------|-----|-----------------------------------|
| ①    | 047024  | 1   | King post, left hand side brush   |
| ②    | 014801  | 1   | Brush link, side brush            |
| ③    | 013011  | 1   | Top link (turnbuckle), side brush |
| ④    | 011140  | 1   | Bolt M18 x 90                     |
| ⑤    | 013011  | 1   | Washer, plain, M18                |
| ⑥    | 011139  | 2   | Nyloc nut T M18                   |
| ⑦    | 046284  | 1   | Swivel plate, side brush          |

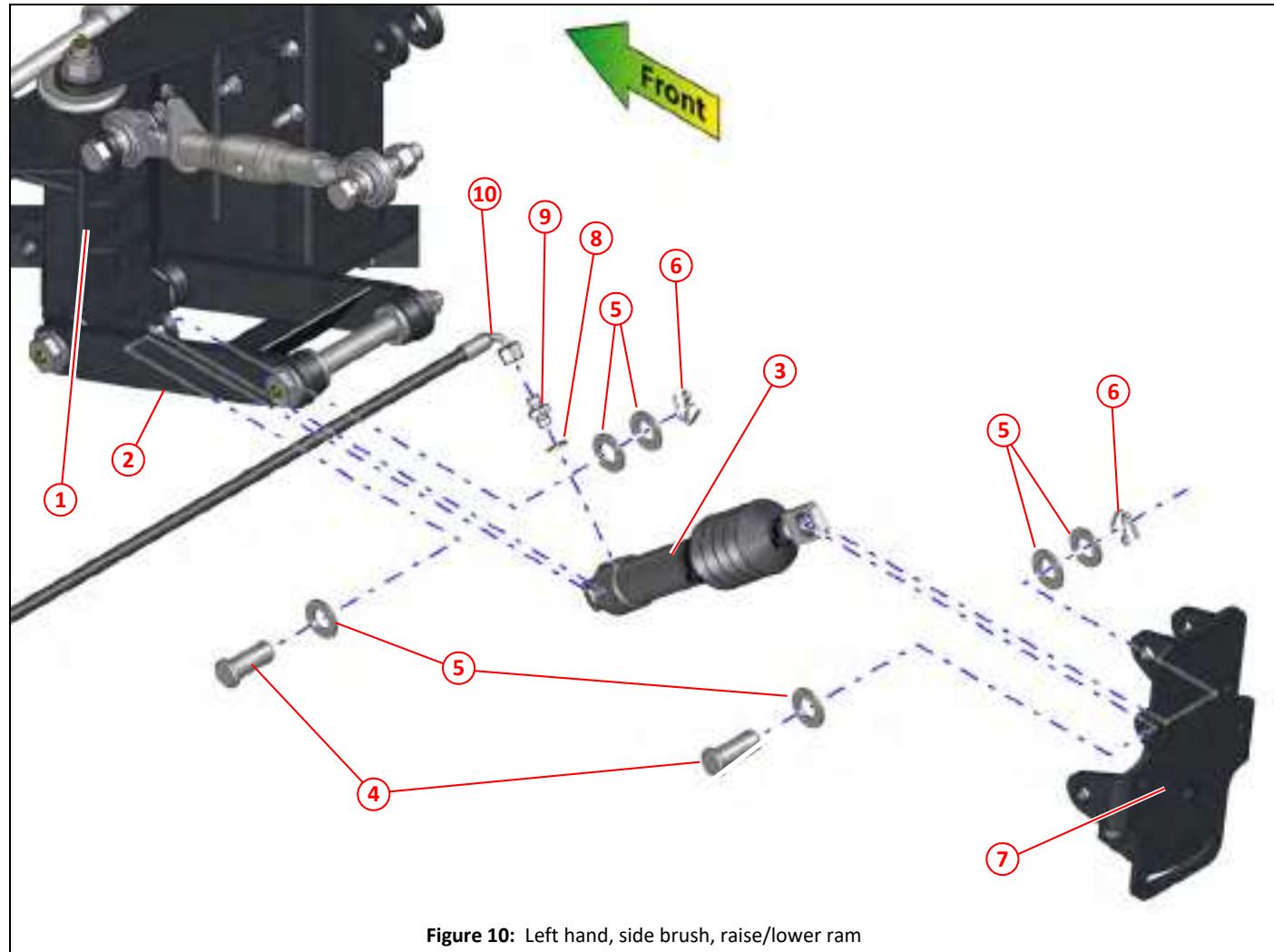
**Left hand, side brush, raise/lower ram**


Figure 10: Left hand, side brush, raise/lower ram

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 047024  | 1   | King post, left hand side brush  |
| ②    | 014801  | 1   | Brush link, side brush   |
| ③    | 024539  | 1   | Ram No. 12 240/340 assembly  |
| ④    | 046750  | 2   | Clevis pin, Ø20 x 50   |
| ⑤    | 011102  | 6   | Washer, plain, M20   |
| ⑥    | 011122  | 2   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ "                                   |
| ⑦    | 046284  | 1   | Swivel plate, side brush   |
| ⑧    | 011152  | 1   | Dowty seal $\frac{1}{4}$ " BSP   |
| ⑨    | 012539  | 1   | Restrictor No 5 $\frac{1}{4}$ " BSP x $\frac{1}{4}$ " BSP $\frac{1}{32}$ " white |
| ⑩    | 001371  | 1   | Hose $\frac{1}{4}$ " BSP x 1225, straight and 90°                                |

## Left hand, side brush, swivel plate

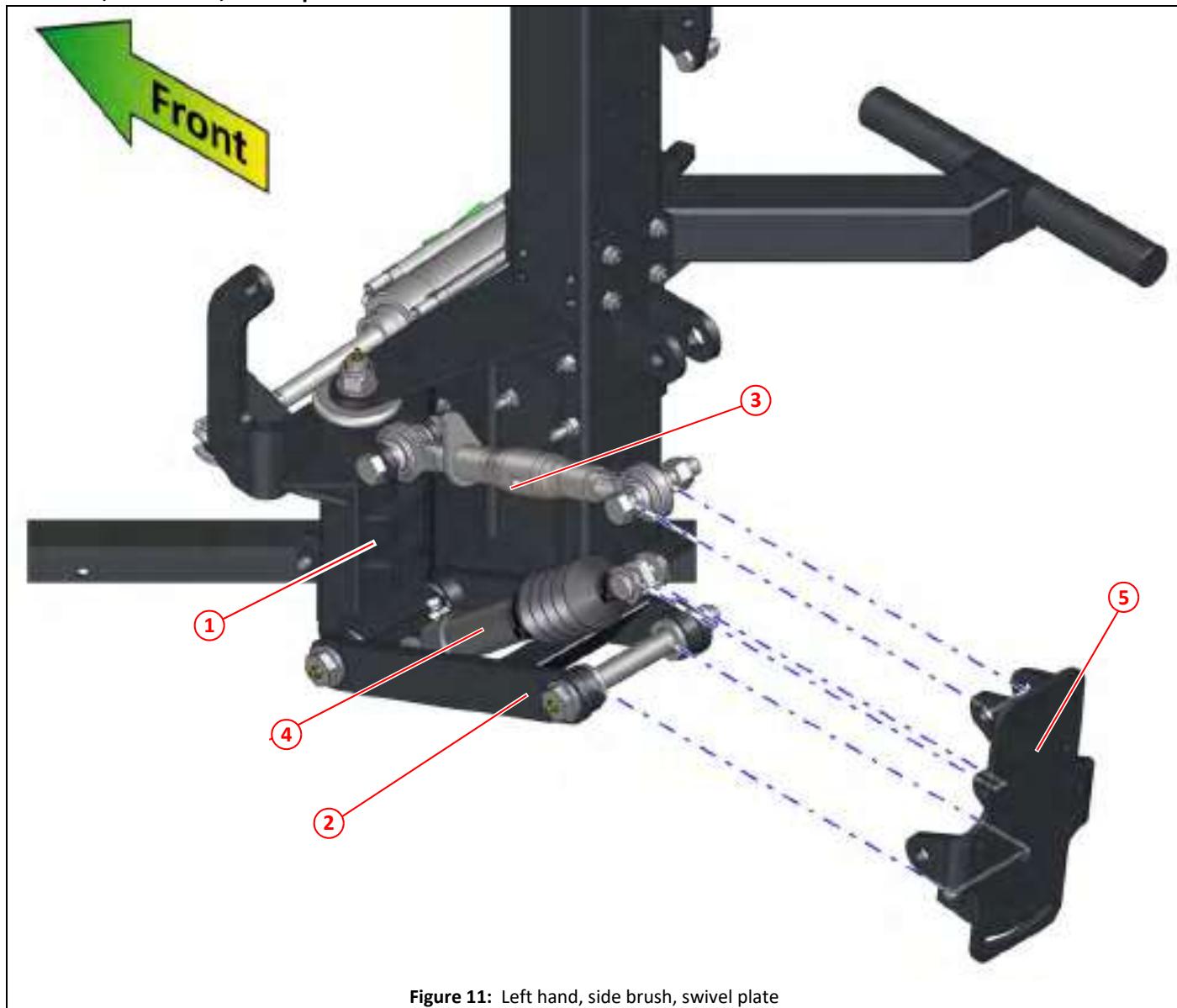
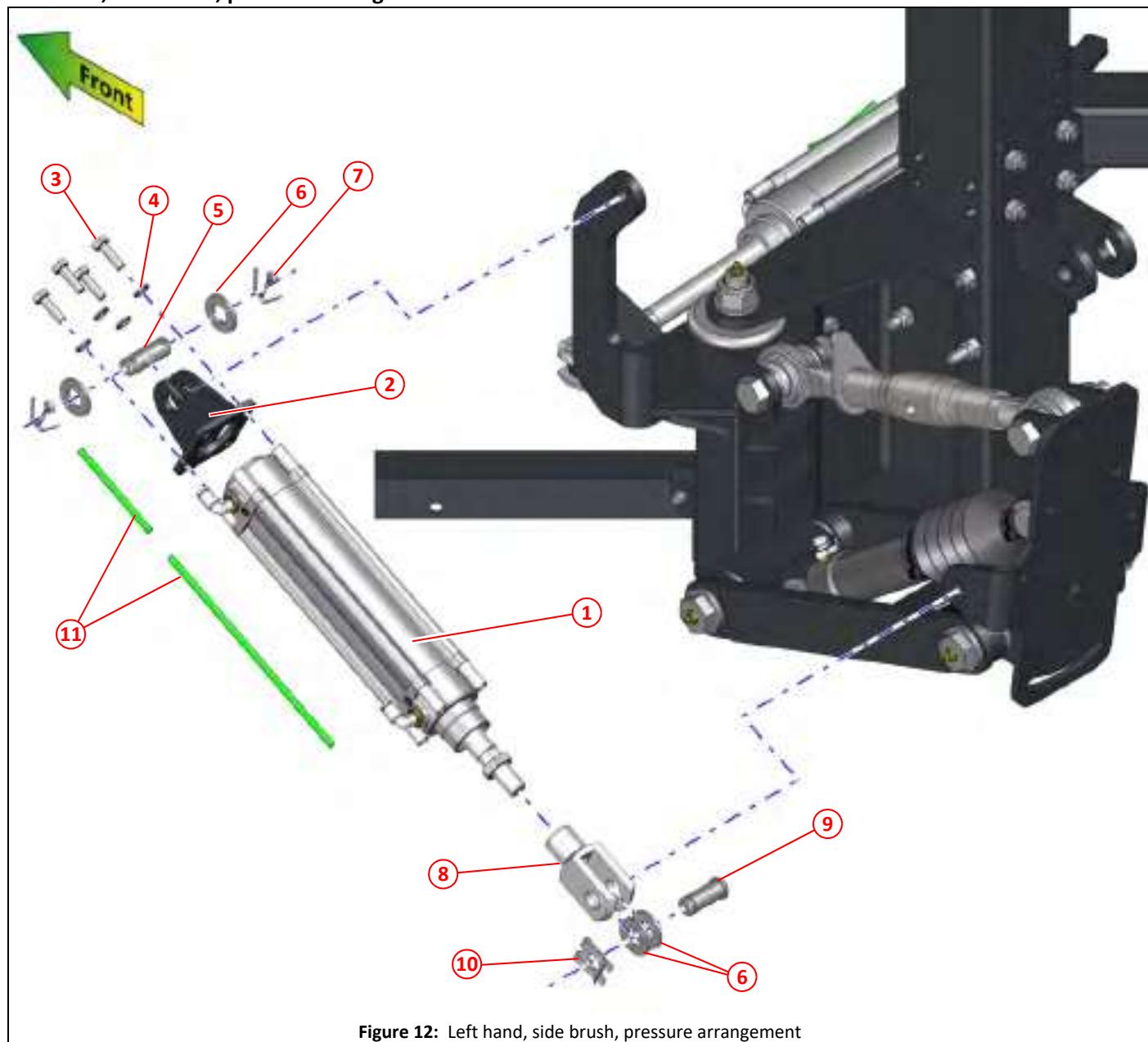


Figure 11: Left hand, side brush, swivel plate

| Item | Part No | Qty | Description                     |  |
|------|---------|-----|---------------------------------|--|
| ①    | 047024  | 1   | King post, left hand side brush |  |
| ②    | 014801  | 1   | Brush link, side brush          |  |
| ③    | 013011  | 1   | Top link (turnbuckle)           |  |
| ④    | 024539  | 1   | Ram No. 12 240/340 assembly     |  |
| ⑤    | 046284  | 1   | Swivel plate, side brush        |  |

## Left hand, side brush, pressure arrangement



| Item | Part No | Qty | Description                                    |
|------|---------|-----|--|
| ①    | 020298  | 1   | Pneumatic cylinder 50 x 160                    |
| ②    | 023122  | 1   | Pivot, cylinder mount bracket                  |
| ③    | 011011  | 4   | Setscrew M8 x 25                               |
| ④    | 011093  | 4   | Spring washer M8                               |
| ⑤    | 023123  | 1   | Pin ø16 x 46                                   |
| ⑥    | 011135  | 4   | Washer, plain, M16                             |
| ⑦    | 011122  | 2   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ " |
| ⑧    | 020299  | 1   | Clevis, pneumatic, M16 x 1.5                   |
| ⑨    | 022673  | 1   | Clevis pin (turned)                            |
| ⑩    | 022674  | 1   | Retaining clip M16                             |
| ⑪    | 024650  | 2   | 6mm green air pipe, length as required         |

## Left hand, side brush, leg hose tidy

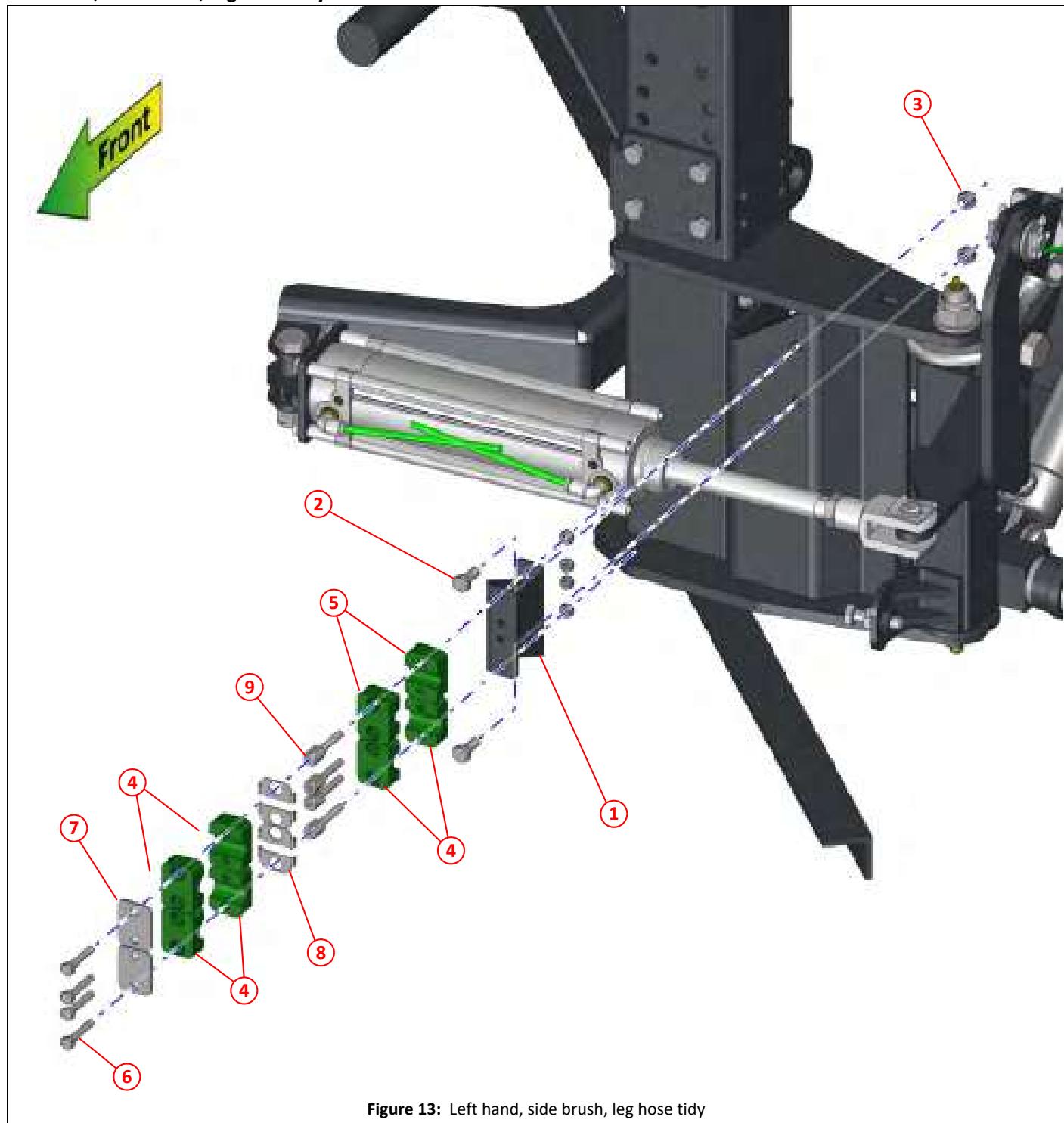
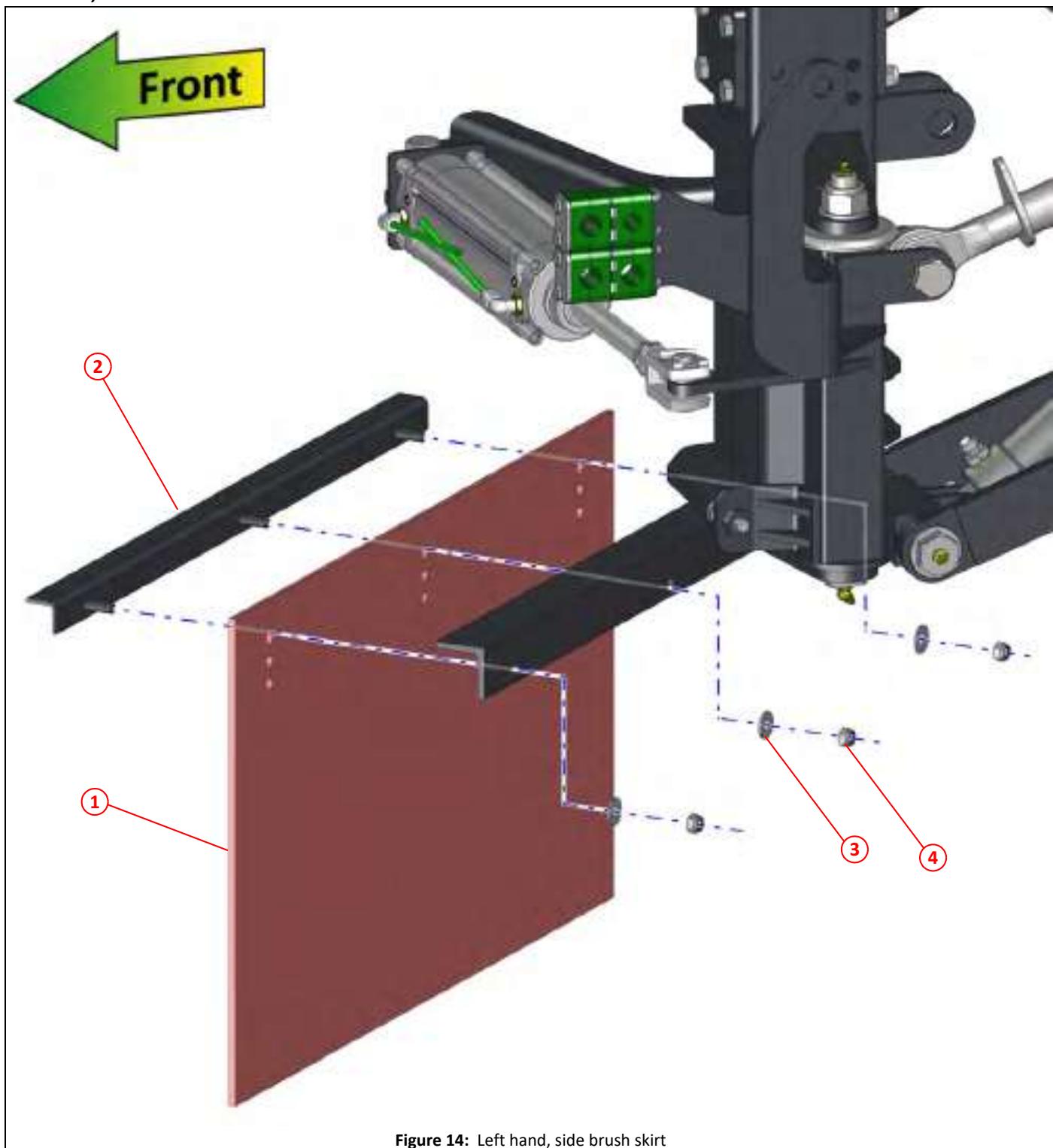


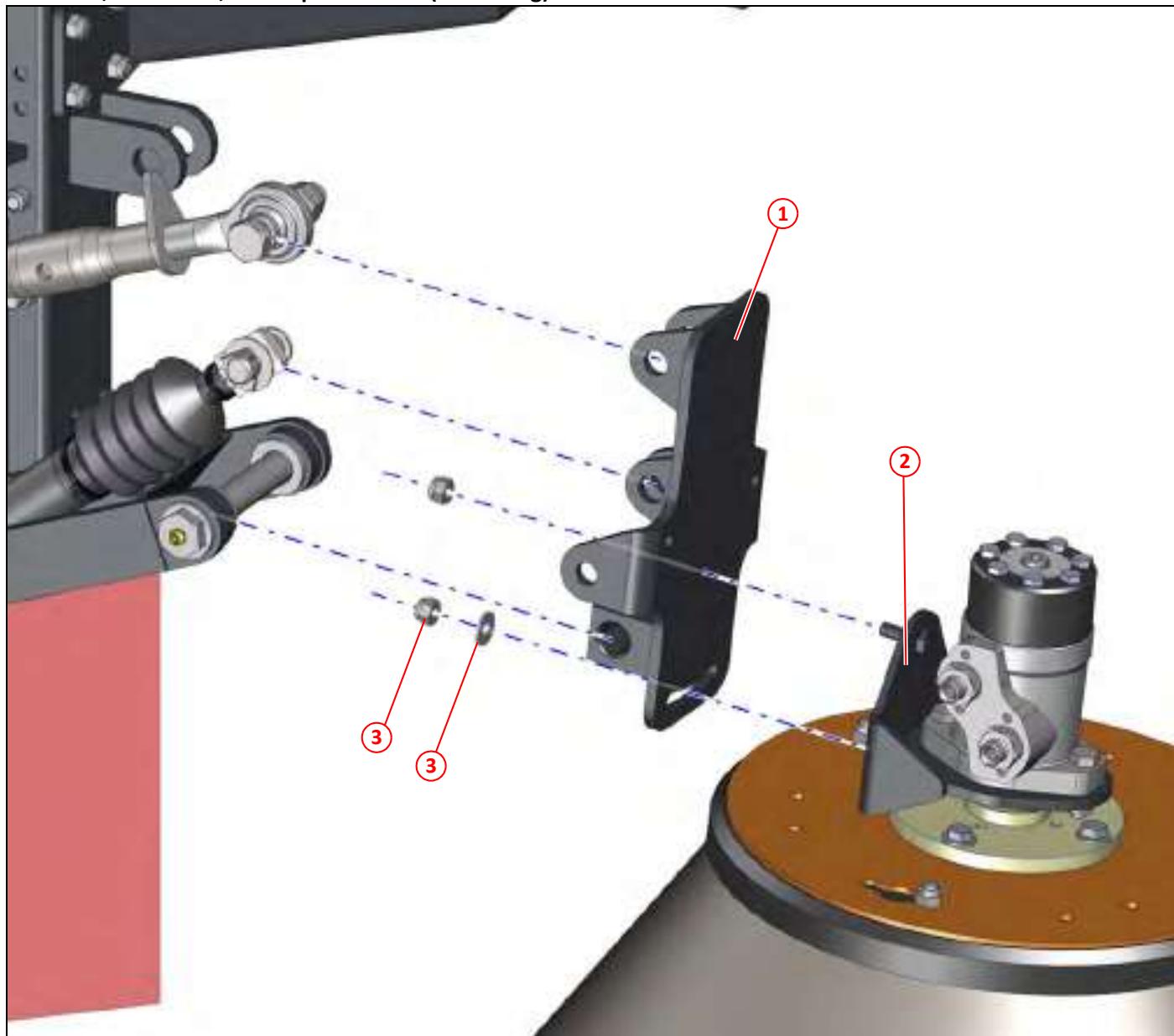
Figure 13: Left hand, side brush, leg hose tidy

| Item | Part No | Qty | Description                             |
|------|---------|-----|---|
| ①    | 047228  | 1   | Left hand leg, hose tidy                |
| ②    | 011010  | 2   | Set screw M8 x 20                       |
| ③    | 011073  | 2   | Nyloc nut T M8                          |
| ④    | 002163  | 6   | Pipe clamp block, 17.2 single pipe/hose |
| ⑤    | 031316  | 2   | Pipe clamp block, 1/4" single pipe/hose |
| ⑥    | 011068  | 4   | Bolt M6 x 35                            |
| ⑦    | 031317  | 2   | Clamp plate flat                        |
| ⑧    | 000472  | 4   | Locking plate SIG1                      |
| ⑨    | 000470  | 4   | Stacking bolt, 35mm (AF4)               |
| ⑩    | 011071  | 4   | Nyloc nut T M6                          |

**Left hand, side brush skirt**

**Figure 14:** Left hand, side brush skirt

| Item | Part No | Qty | Description                            | File |
|------|---------|-----|--|------|
| ①    | 010247  | 1   | Skirt, side brush, 3-pitch, heavy duty |      |
| ②    | 010275  | 1   | Skirt clamp                            |      |
| ③    | 011092  | 3   | Washer, plain, M8                      |      |
| ④    | 011073  | 3   | Nyloc nut T M8                         |      |

## Left hand, side brush, swivel plate attach (non titling)



**1** Non tilting side brush is the standard fitment.

Figure 15: Left hand, side brush, swivel plate attach (non titling)

| Item | Part No | Qty | Description               |
|------|---------|-----|---------------------------|
| ①    | 046284  | 1   | Swivel plate, side brush  |
| ②    | 010007  | 1   | Motor bracket, side brush |
| ③    | 011094  | 1   | Washer, plain, M10        |
| ④    | 011075  | 2   | Nyloc nut T M10           |

## Left hand, side brush motor (non tilting)

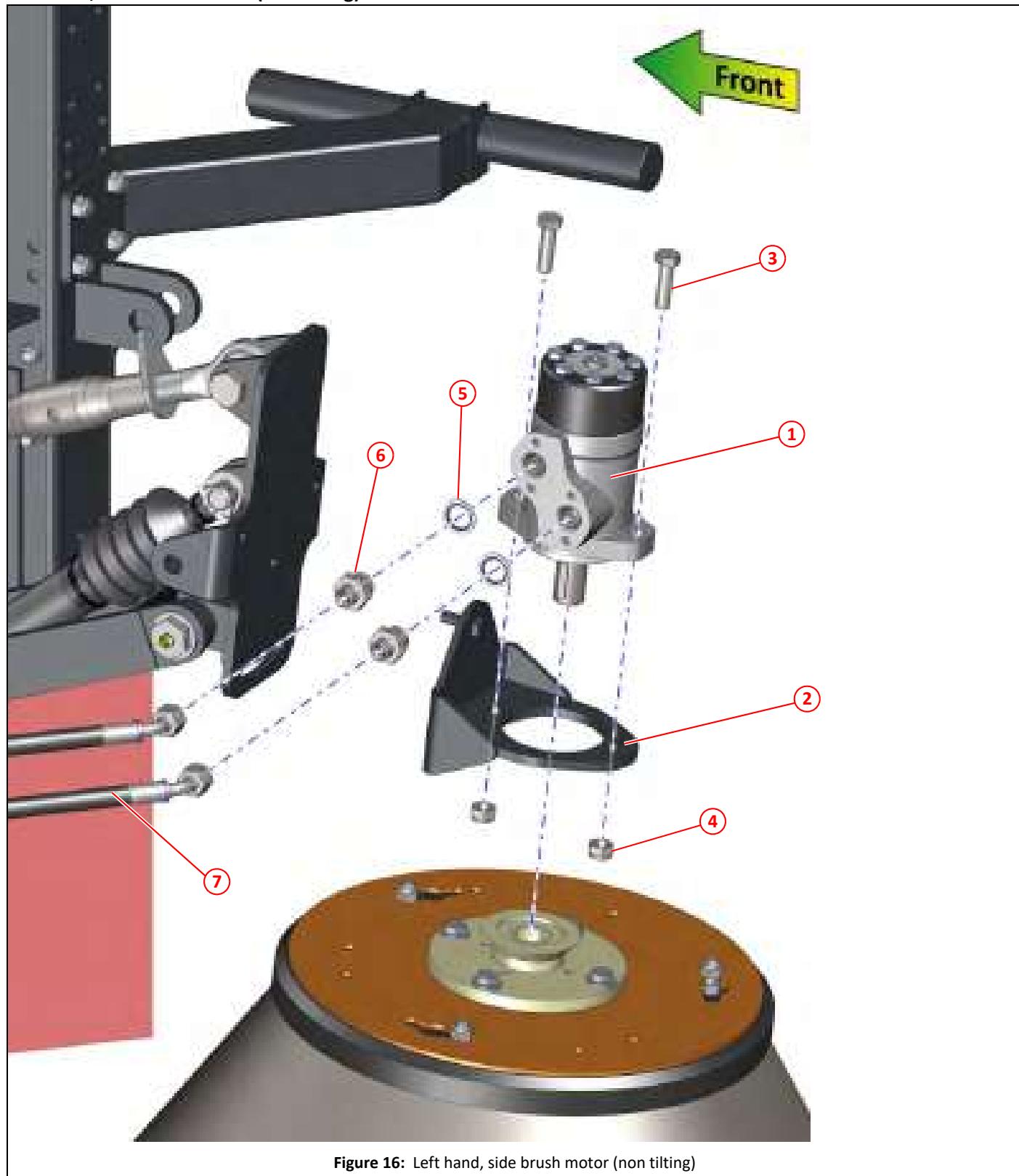


Figure 16: Left hand, side brush motor (non tilting)

| Item     | Part No | Qty | Description                                       |
|----------|---------|-----|---|
| <b>①</b> | 010749  | 1   | Motor 3597 (OMP 200)                              |
| <b>②</b> | 010007  | 1   | Motor bracket, side brush                         |
| <b>③</b> | 011069  | 2   | Bolt M12 x 40                                     |
| <b>④</b> | 011077  | 2   | Nyloc nut T M12                                   |
| <b>⑤</b> | 011154  | 2   | Dowty seal $\frac{1}{2}$ " BSP                    |
| <b>⑥</b> | 011167  | 2   | Adapter $\frac{1}{2}$ " x $\frac{3}{8}$ " BSP     |
| <b>⑦</b> | 001372  | 2   | Hose $\frac{3}{8}$ " BSP x 1400, straight and 45° |

## Left hand, side brush, swivel plate attach (tilting)

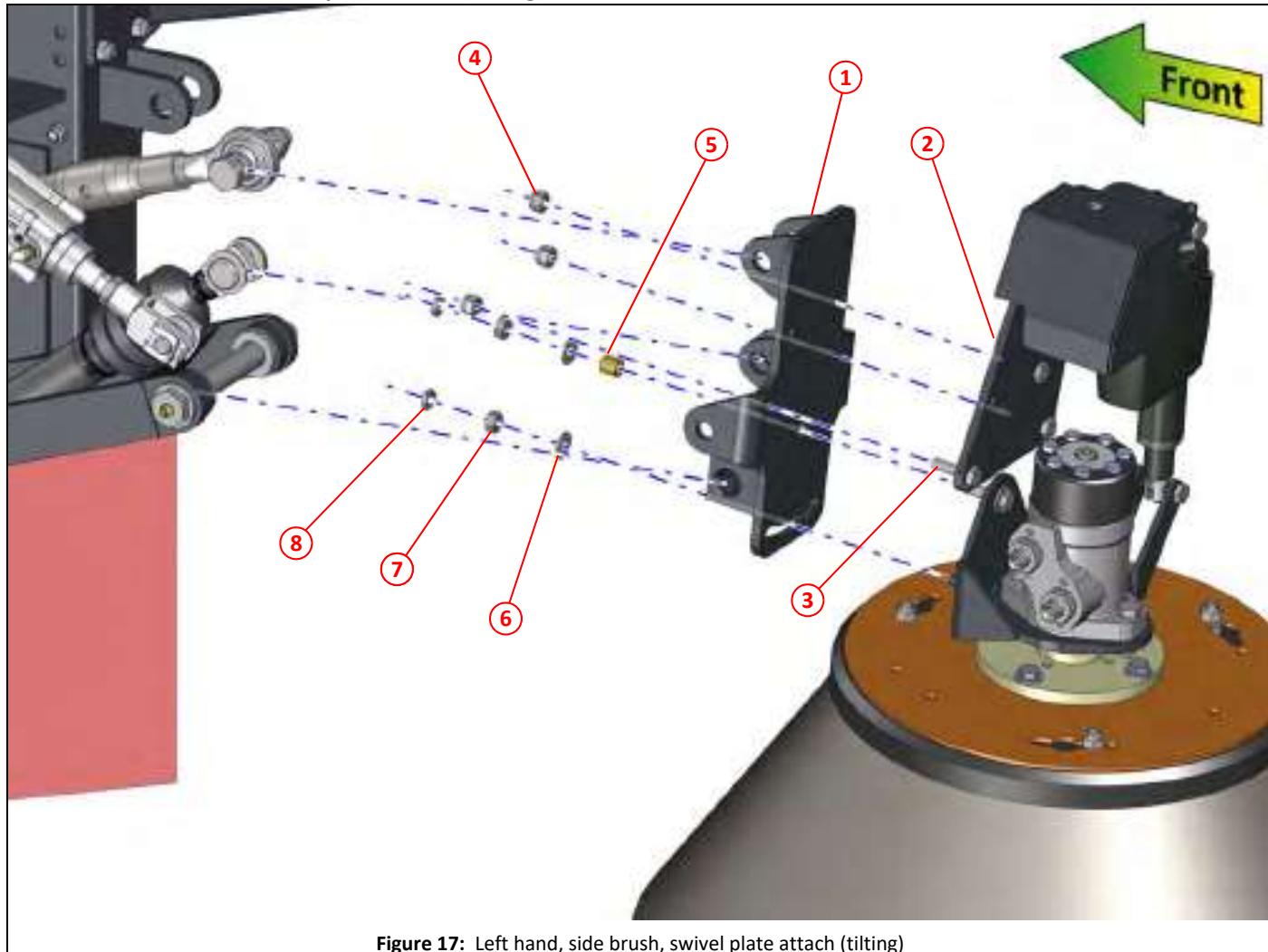


Figure 17: Left hand, side brush, swivel plate attach (tilting)

| Item | Part No | Qty | Description                   |
|------|---------|-----|-------------------------------|
| ①    | 046284  | 1   | Swivel plate, side brush      |
| ②    | 046279  | 1   | Brush tilt bracket, left hand |
| ③    | 011033  | 4   | Setscrew M10 x 35             |
| ④    | 011075  | 3   | Nyloc nut T M10               |
| ⑤    | 046282  | 1   | Bush 16 x 10.5 x 15           |
| ⑥    | 011094  | 2   | Washer, plain, M10            |
| ⑦    | 011074  | 2   | Full nut M10                  |
| ⑧    | 000506  | 2   | Half nut M10                  |

## Left hand, side brush tilt (tilting)

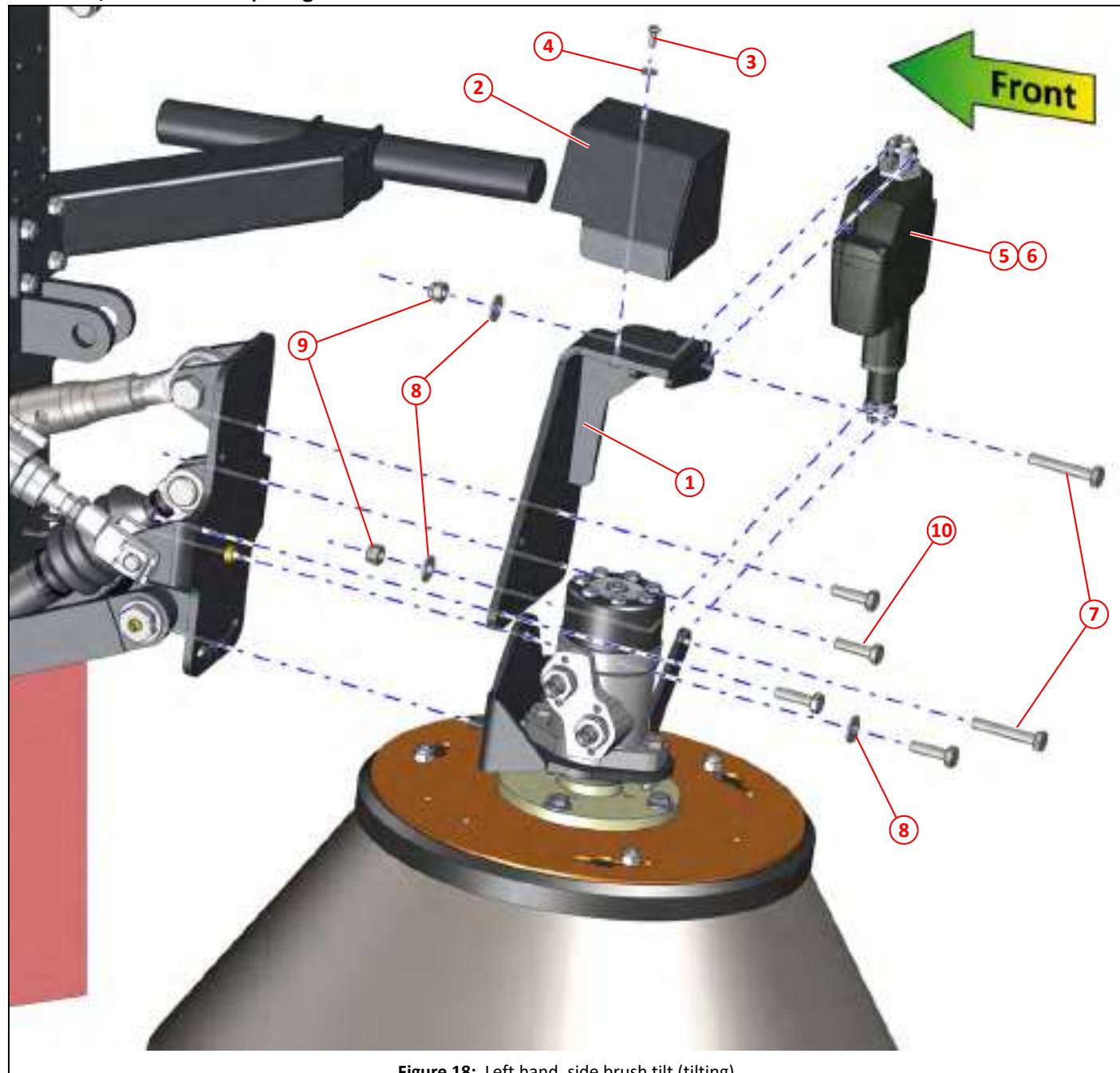


Figure 18: Left hand, side brush tilt (tilting)

| Item | Part No | Qty | Description                                     |
|------|---------|-----|---|
| ①    | 046279  | 1   | Brush tilt bracket, left hand                   |
| ②    | 046491  | 1   | Actuator cover, left hand                       |
| ③    | 000373  | 1   | Socket dome head screw M6 x 16, stainless steel |
| ④    | 000254  | 1   | Plain washer, M6, stainless steel               |
| ⑤    | 046270  | 1   | LA25/100 Actuator (12V)                         |
| ⑥    | 047660  | 1   | LA25/100 Actuator (24V)                         |
| ⑦    | 011036  | 2   | Bolt M10 x 60                                   |
| ⑧    | 011094  | 3   | Plain washer, M10                               |
| ⑨    | 011075  | 2   | Nyloc nut T M10                                 |
| ⑩    | 011033  | 4   | Setscrew M10 x 35                               |

## Left hand, side brush motor (tilting)

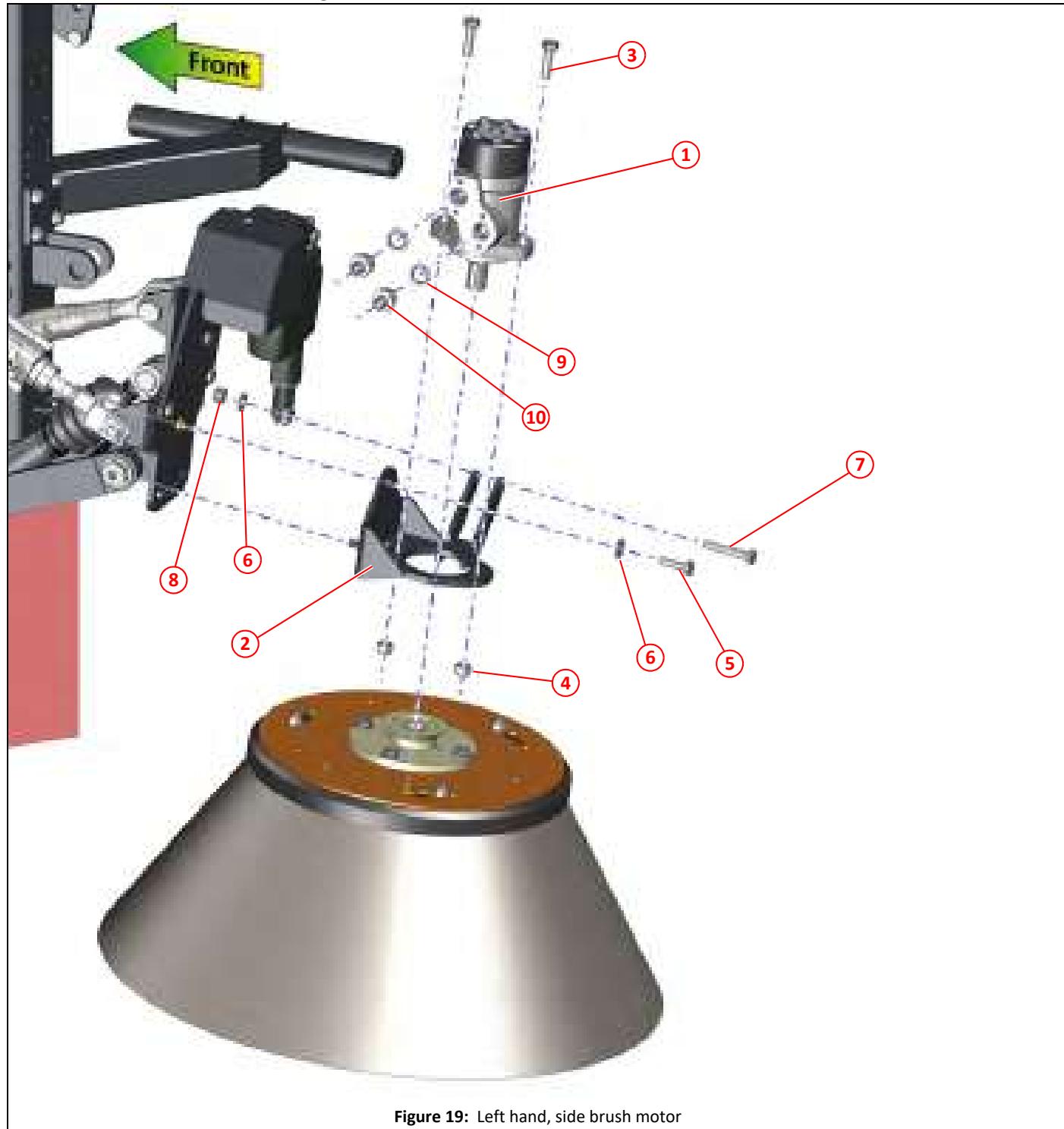
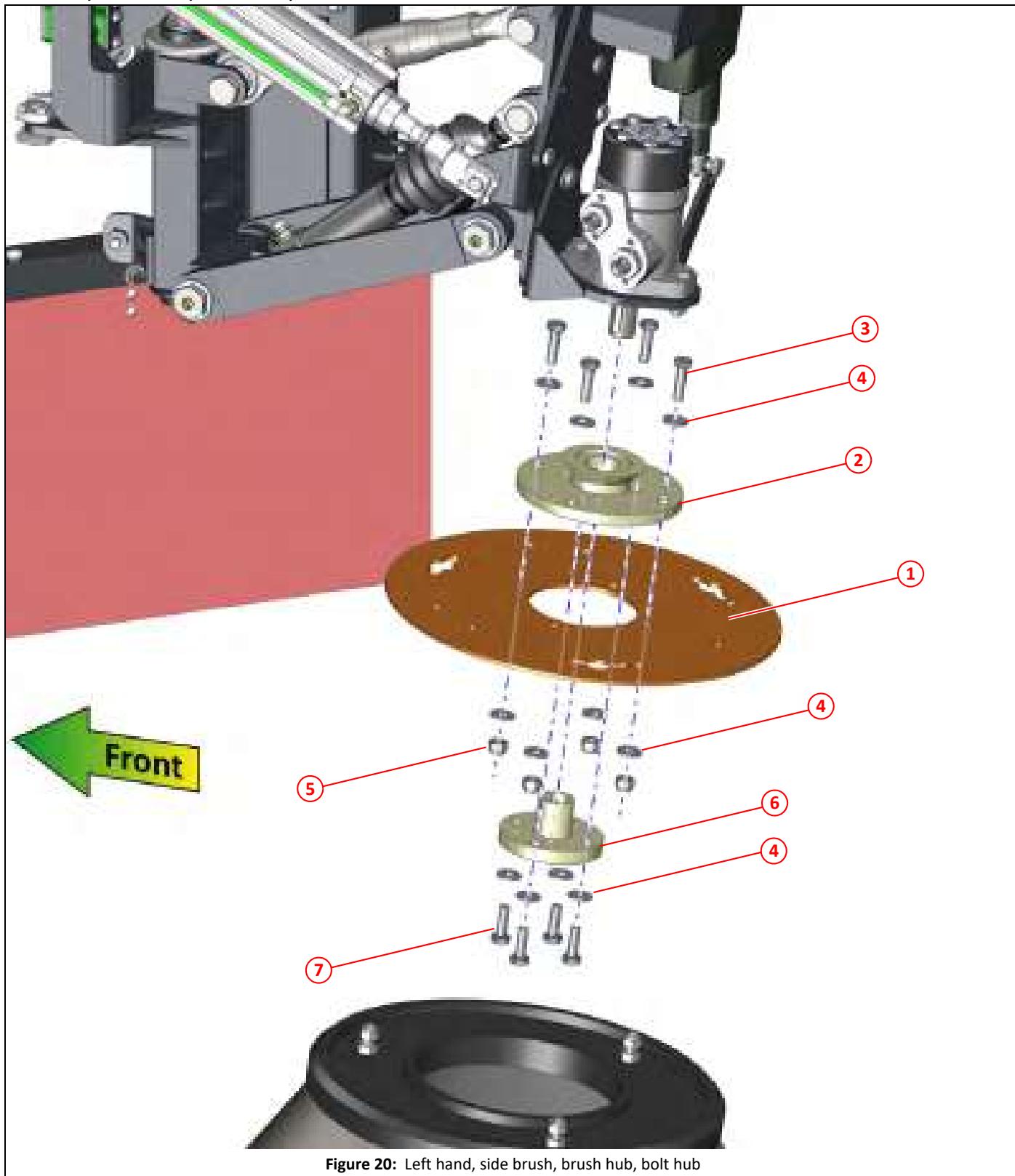


Figure 19: Left hand, side brush motor

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 010749  | 1   | Motor 3597 (OMP 200)                                  |
| ②    | 047533  | 1   | Motor bracket tilting side brush, bolt hub, left hand |
| ③    | 011069  | 2   | Bolt M12 x 40   |
| ④    | 011077  | 2   | Nyloc nut T M12                                       |
| ⑤    | 011033  | 1   | Setscrew M10 x 35                                     |
| ⑥    | 011094  | 2   | Plain washer, M10                                     |
| ⑦    | 011036  | 1   | Bolt M10 x 60   |
| ⑧    | 011075  | 1   | Nyloc nut T M10                                       |
| ⑨    | 011154  | 2   | Dowty seal $\frac{1}{2}$ " BSP                        |
| ⑩    | 011167  | 2   | Adapter $\frac{1}{2}$ " x $\frac{3}{8}$ " BSP         |

**Left hand, side brush, brush hub, bolt hub**


| Item | Part No | Qty | Description                            |
|------|---------|-----|--|
| ①    | 047484  | 1   | Brush hub 7000 / side brush (bolt hub) |
| ②    | 047482  | 1   | Plate hub                              |
| ③    | 000462  | 4   | Setscrew M10 x 35, stainless steel     |
| ④    | 000270  | 12  | Plain washer, M10, stainless steel     |
| ⑤    | 011075  | 4   | Nyloc nut T M10                        |
| ⑥    | 047481  | 1   | Sprung hub                             |
| ⑦    | 000461  | 4   | Setscrew M10 x 30, stainless steel     |

## Left hand, side brush, water jets mounting

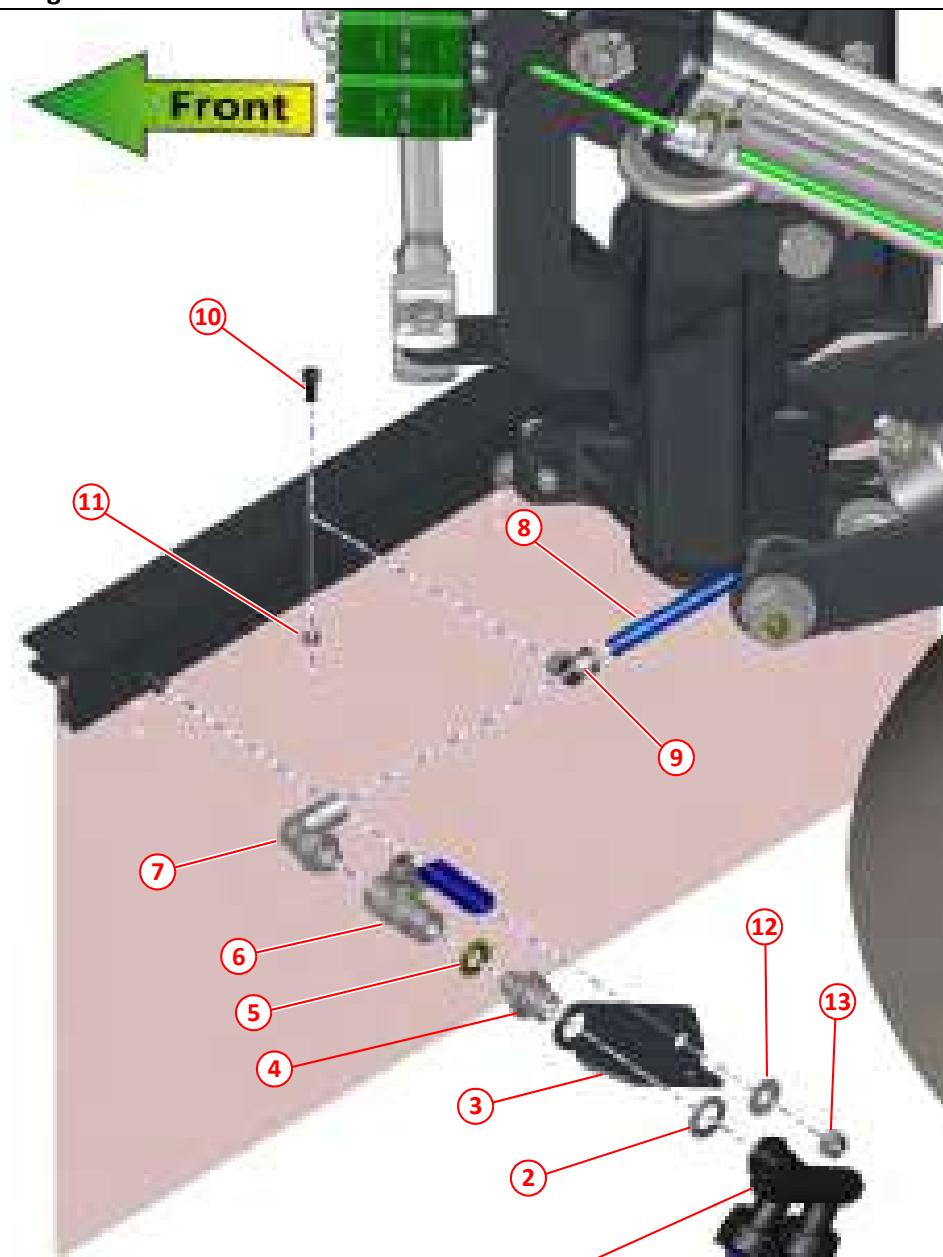
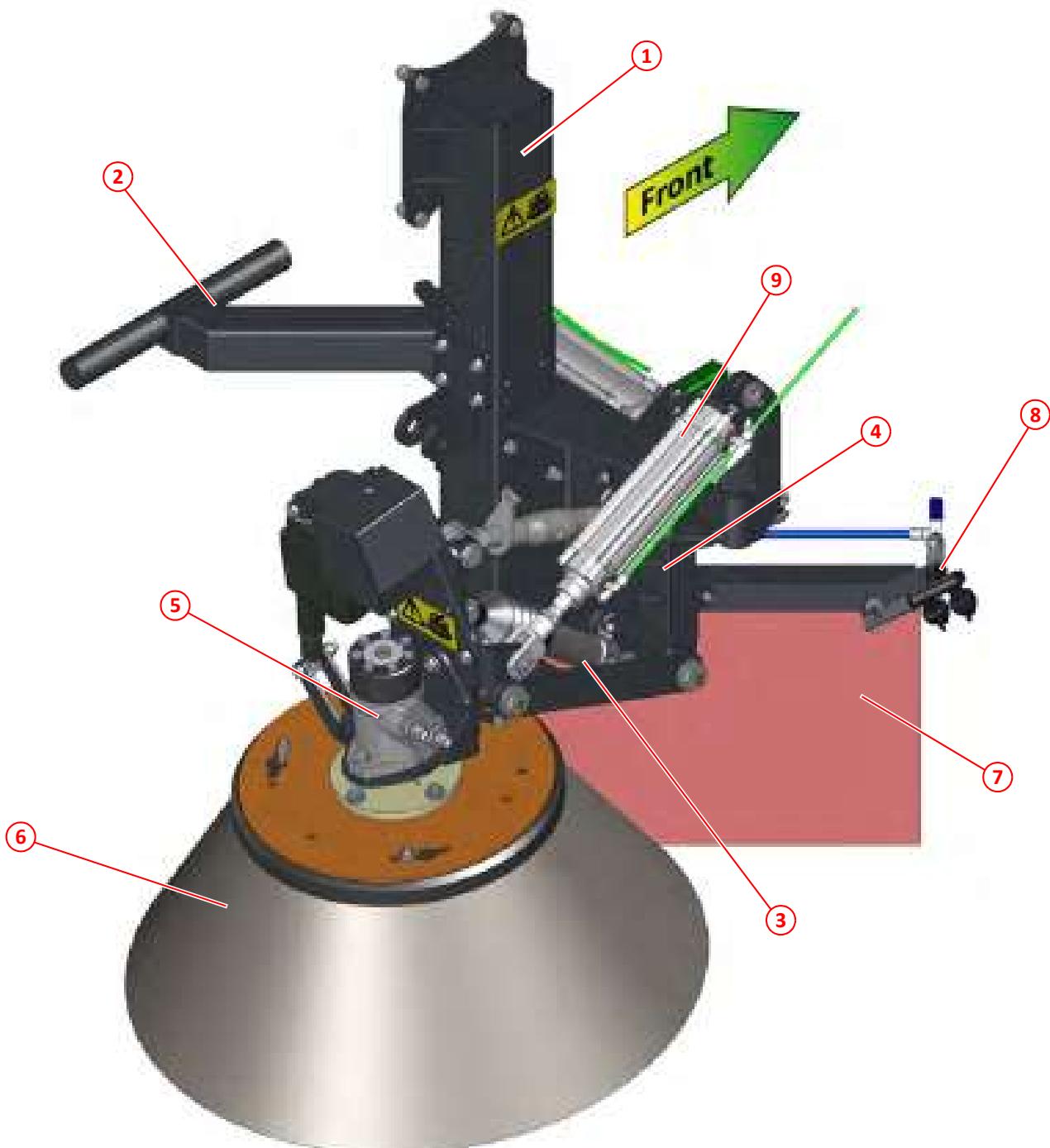


Figure 21: Left hand, side brush, water jets mounting

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 036044  | 1   | Water jets, double swivel nozzle holder assembly                     |
| ②    | 011153  | 1   | Dowty seal $\frac{3}{8}$ " BSP                                       |
| ③    | 036042  | 1   | Nozzle bracket, twin nozzle  |
| ④    | 011199  | 1   | Adapter $\frac{3}{8}$ " BSP x $\frac{1}{4}$ " BSP                    |
| ⑤    | 011152  | 1   | Dowty seal $\frac{1}{4}$ " BSP                                       |
| ⑥    | 011743  | 1   | Valve, ball, $\frac{1}{4}$ " BSP                                     |
| ⑦    | 047602  | 1   | Adapter, angle, 90° push in 10mm x $\frac{1}{4}$ " BSP               |
| ⑧    | 041031  | 1   | Blue flexible nylon tubing, $\varnothing$ 10mm, (length as required) |
| ⑨    | 021914  | 1   | P-clip $\varnothing$ 12mm, rubber sealed                             |
| ⑩    | 000234  | 1   | Setscrew, pan head pozidriv, M5 x 16, black                          |
| ⑪    | 000155  | 1   | Nyloc nut M5   |
| ⑫    | 011092  | 1   | Plain washer M8  |
| ⑬    | 011073  | 1   | Nyloc nut T M8   |

## Right hand leg and side brush arrangement

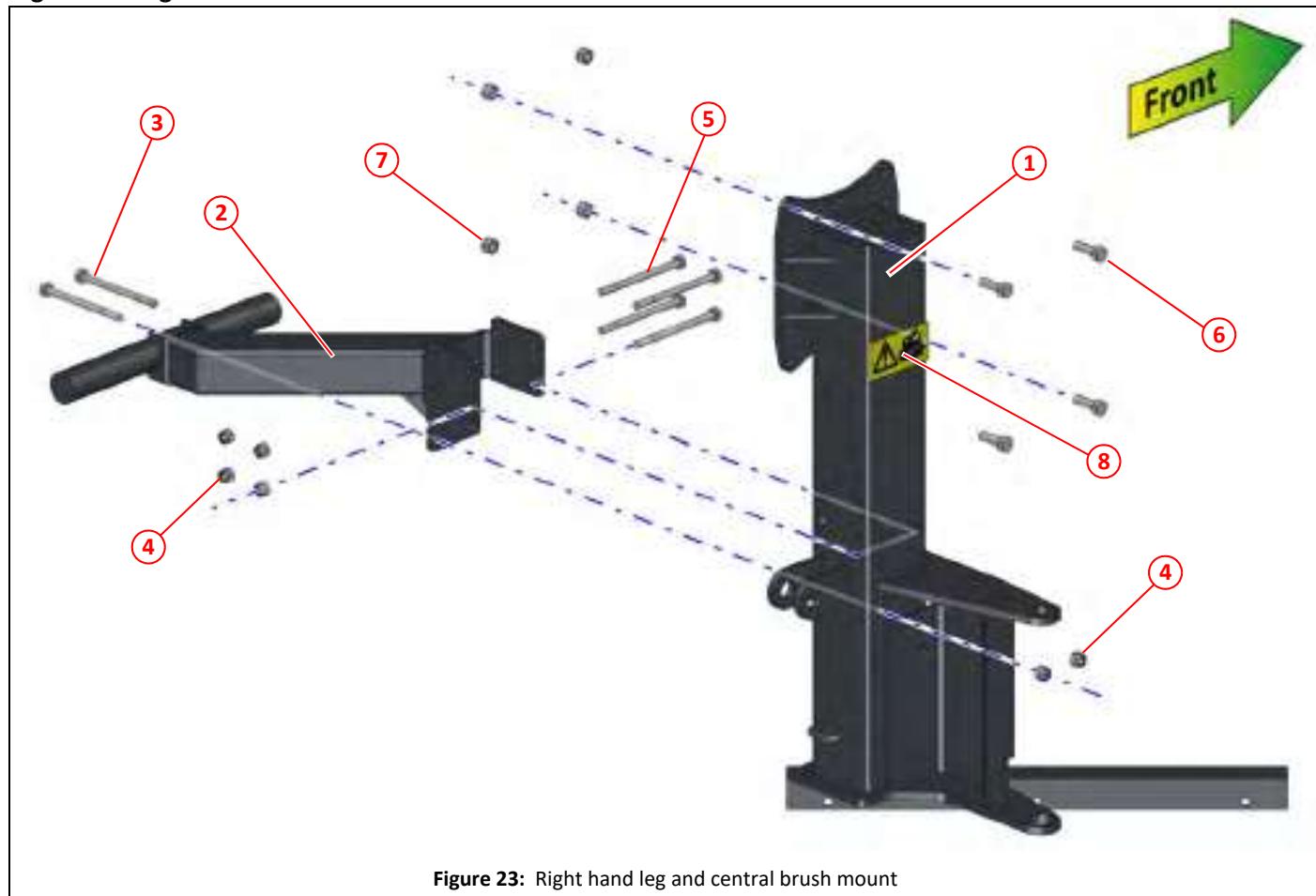


**i** Shown with brush pressure option.

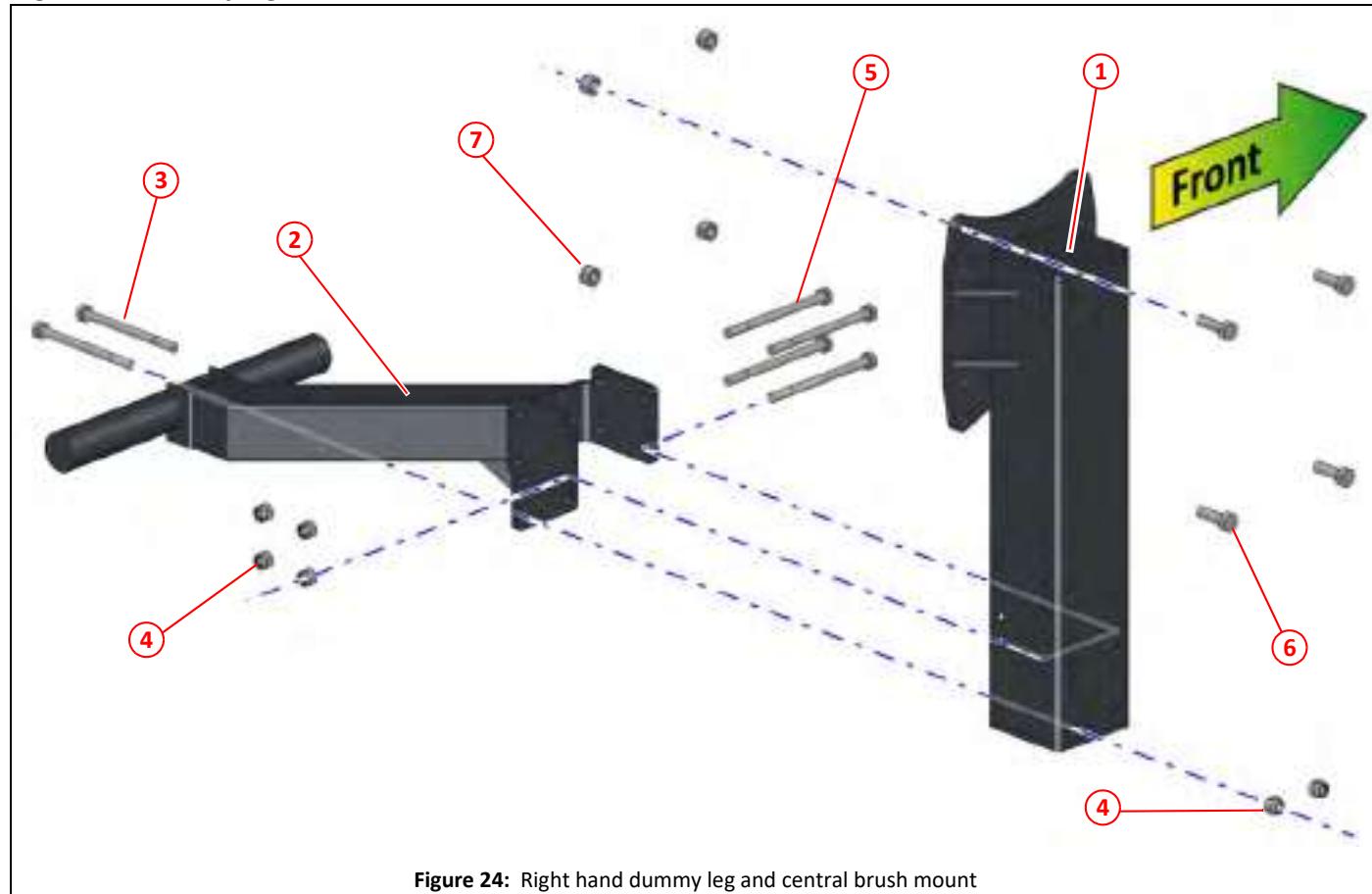
Figure 22: Right hand leg and side brush arrangement

| Item | Part No | Qty | Description   |  |
|------|---------|-----|---|--|
| ①    | 046842  | 1   | Right hand leg  |  |
| ②    | 034335  | 1   | Right hand central brush (wide sweep) adjustable mount    |  |
| ③    |         |     | Right hand side brush raise/lower assembly                |  |
| ④    |         |     | Right hand side brush king post, swing in/out arrangement |  |
| ⑤    |         |     | Side brush motor assembly                                 |  |
| ⑥    |         |     | Side brush  |  |
| ⑦    |         |     | Front skirt, side brush                                   |  |
| ⑧    |         |     | Side brush dual water spray                               |  |
| ⑨    |         |     | Side brush pressure cylinder (option)                     |  |

## Right hand leg and central brush mount

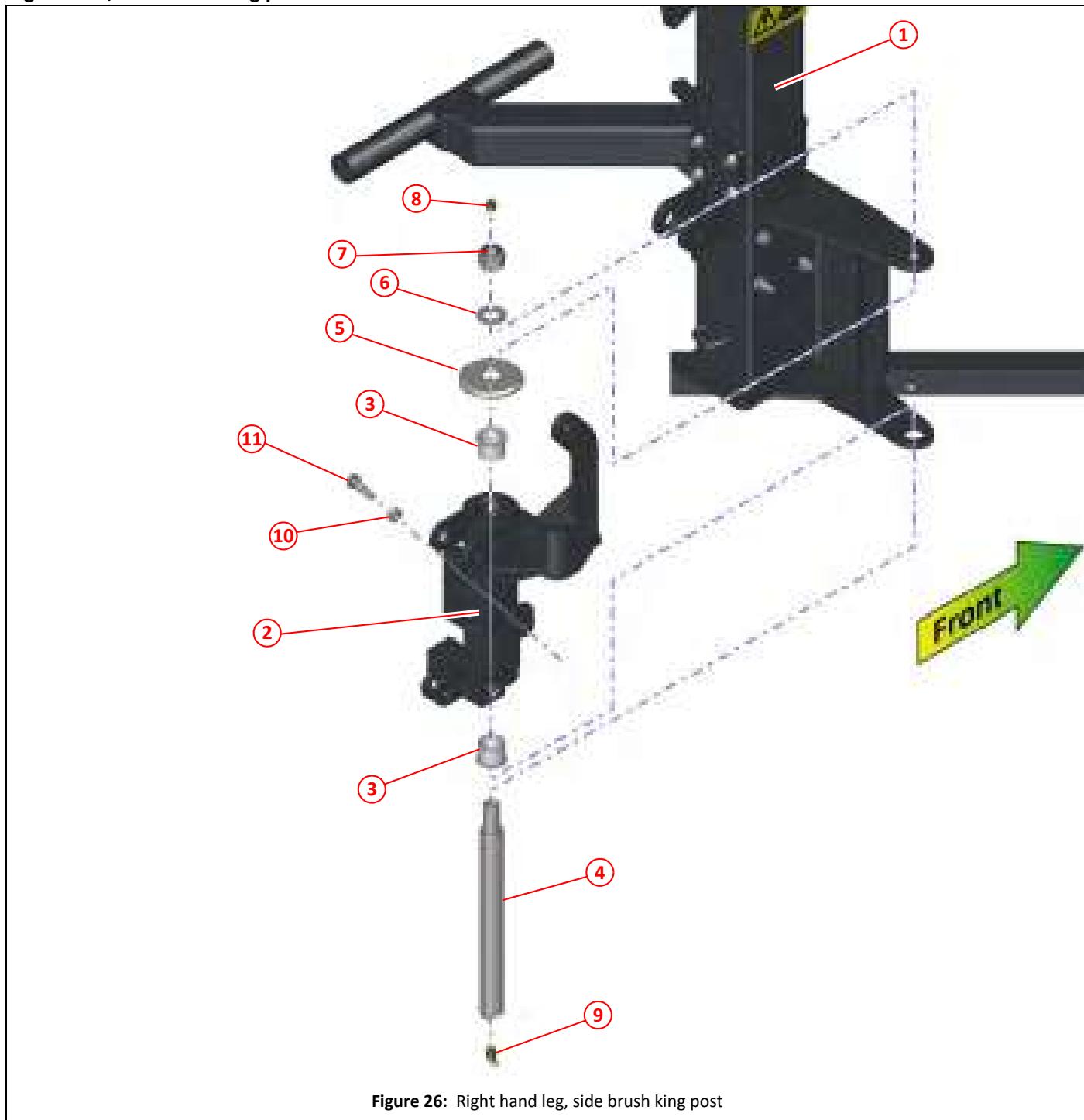


| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 046842  | 1   | Right hand leg   |
| ②    | 034335  | 1   | Right hand central brush (wide sweep) adjustable mount |
| ③    | 011407  | 2   | Bolt M10 x 120   |
| ④    | 011075  | 6   | Nyloc nut T M10  |
| ⑤    | 000075  | 4   | Bolt M10 x 130   |
| ⑥    | 011053  | 4   | Setscrew M12 x 35                                      |
| ⑦    | 011077  | 2   | Nyloc nut T M12  |
| ⑧    | 022383  | 1   | Label - Brush Warning                                  |

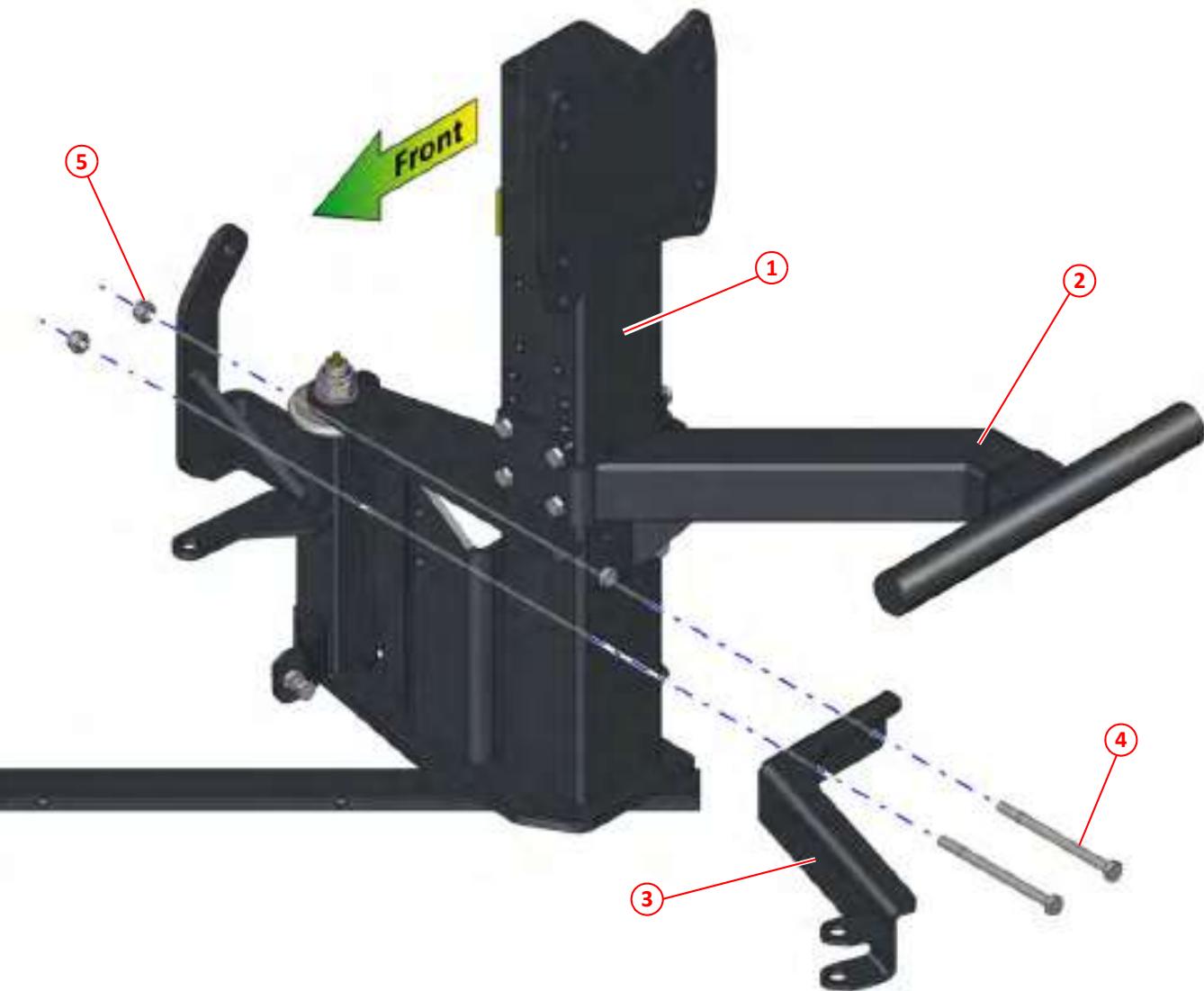
**Right hand dummy leg and central brush mount**


| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 042867  | 1   | Right hand dummy leg                                   |
| ②    | 034335  | 1   | Right hand central brush (wide sweep) adjustable mount |
| ③    | 011407  | 2   | Bolt M10 x 120   |
| ④    | 011075  | 6   | Nyloc nut T M10  |
| ⑤    | 000075  | 4   | Bolt M10 x 130   |
| ⑥    | 011053  | 4   | Setscrew M12 x 35                                      |
| ⑦    | 011077  | 2   | Nyloc nut T M12  |

## Right hand, side brush king post



| Item | Part No | Qty | Description                        |  |
|------|---------|-----|------------------------------------|--|
| ①    | 046842  | 1   | Right hand leg                     |  |
| ②    | 047025  | 1   | King post, right hand side brush   |  |
| ③    | 013012  | 2   | Bush, king post                    |  |
| ④    | 013007  | 1   | Kin pin                            |  |
| ⑤    | 013013  | 1   | Dirt shield                        |  |
| ⑥    | 011102  | 1   | Washer M20                         |  |
| ⑦    | 011082  | 2   | Nyloc nut M20                      |  |
| ⑧    | 010903  | 1   | Grease nipple, straight, 1/8'' BSP |  |
| ⑨    | 011060  | 1   | Grease nipple, 135°, 1/8'' BSP     |  |
| ⑩    | 011074  | 1   | Full nut M10                       |  |
| ⑪    | 011034  | 1   | Setscrew M10 x 40                  |  |

**Right hand, side brush deployment ram mounting bracket**

**Figure 27:** Right hand, side brush deployment ram mounting bracket

| Item | Part No | Qty | Description  | File |
|------|---------|-----|--|------|
| ①    | 046842  | 1   | Right hand leg   |      |
| ②    | 034335  | 1   | Right hand central brush (wide sweep) adjustable mount |      |
| ③    | 047066  | 1   | Right hand side brush deployment ram mounting bracket  |      |
| ④    | 000075  | 2   | Bolt M10 x 130   |      |
| ⑤    | 011075  | 2   | Nyloc nut T M10  |      |

## Right hand, side brush swing in/out ram arrangement

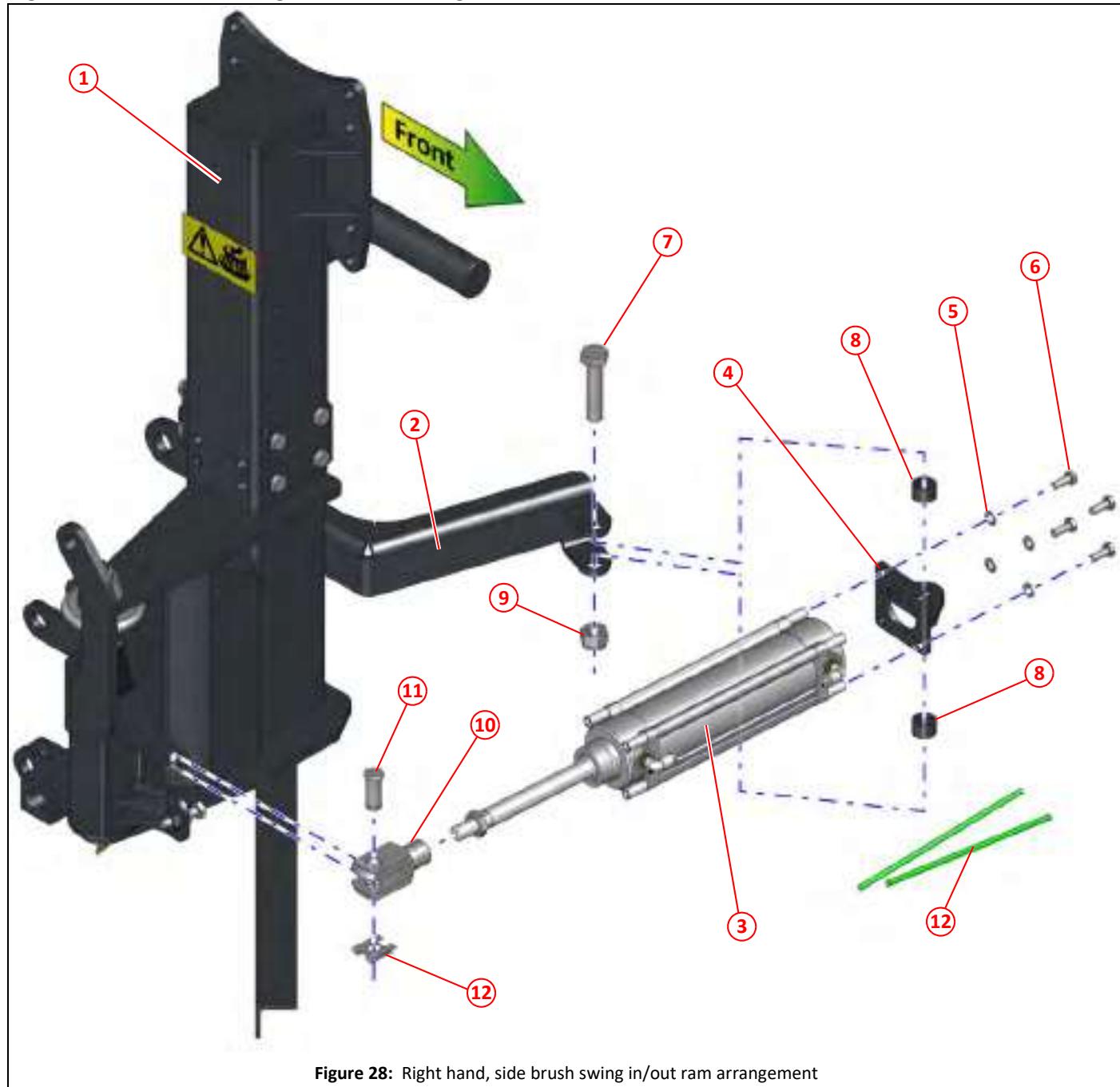
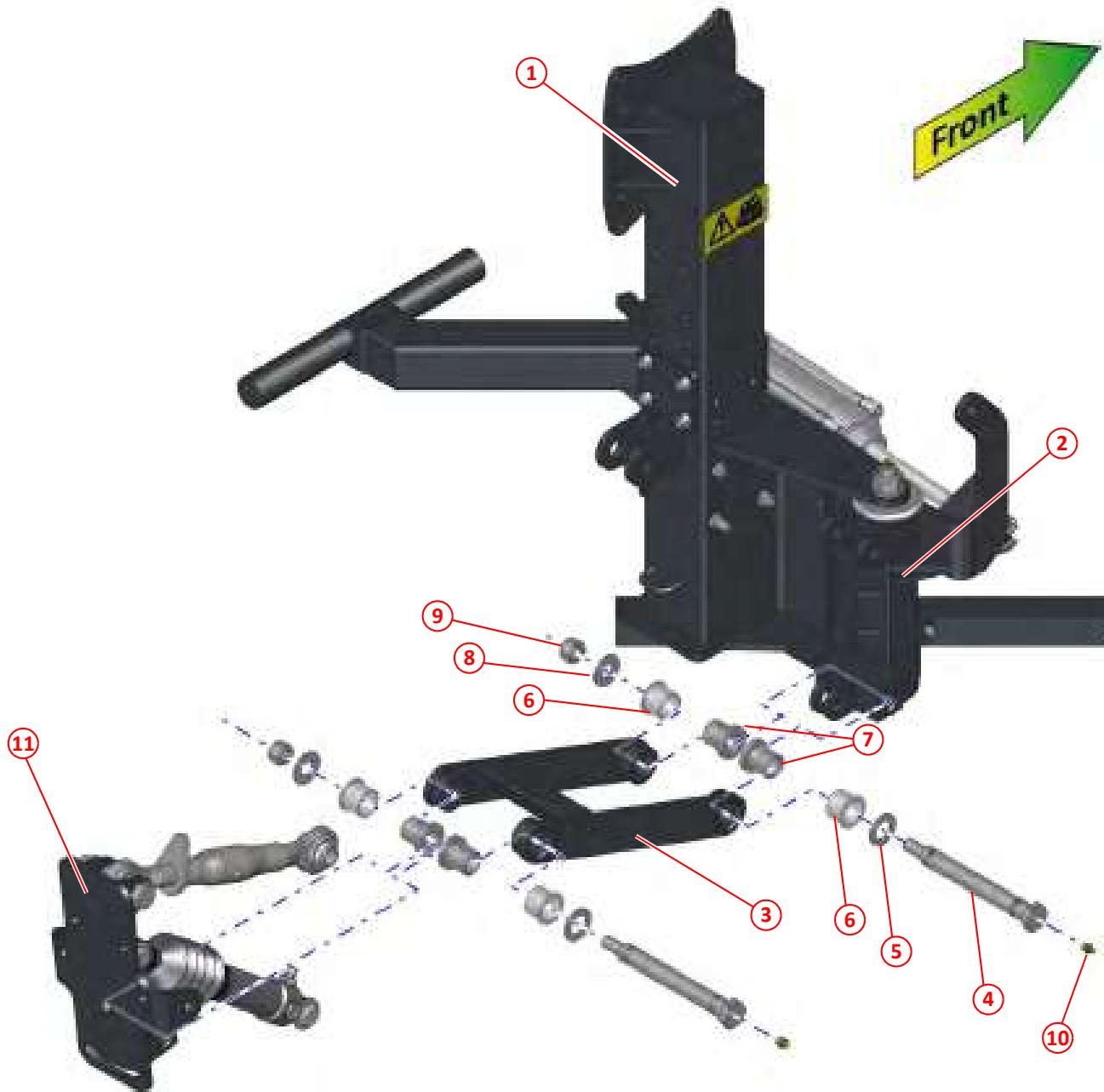


Figure 28: Right hand, side brush swing in/out ram arrangement

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 046842  | 1   | Right hand leg  |
| ②    | 047066  | 1   | Right hand side brush deployment ram mounting bracket |
| ③    | 028306  | 1   | Pneumatic cylinder ø63 x 160                          |
| ④    | 031052  | 1   | Ram end ø63   |
| ⑤    | 011093  | 4   | Spring washer M8                                      |
| ⑥    | 011010  | 4   | Setscrew M8 x 20                                      |
| ⑦    | 011260  | 1   | Bolt M16 x 70   |
| ⑧    | 011000  | 2   | Hose 5/8", fuel SAE100R6, cut to 15mm                 |
| ⑨    | 011060  | 1   | Nyloc nut T M16                                       |
| ⑩    | 020299  | 1   | Clevis pneumatic M16 x 1.5                            |
| ⑪    | 022673  | 1   | Clevis pin (turned)                                   |
| ⑫    | 022674  | 1   | Clip, retaining, M16                                  |

**Right hand, side brush, raise/lower, brush link**

**Figure 29:** Right hand, side brush, raise/lower, brush link

| Item | Part No | Qty | Description                       |
|------|---------|-----|-----------------------------------|
| ①    | 046842  | 1   | Right hand leg                    |
| ②    | 047025  | 1   | King post, right hand side brush  |
| ③    | 014801  | 1   | Brush link, side brush            |
| ④    | 014796  | 2   | Pivot bolt, side brush            |
| ⑤    | 014798  | 2   | Washer 24 x 40 x 3                |
| ⑥    | 013012  | 4   | Bush                              |
| ⑦    | 014799  | 4   | Spacer sleeve, side brush         |
| ⑧    | 014797  | 2   | Washer 17 x 40 x 3                |
| ⑨    | 011060  | 2   | Nyloc nut T M16                   |
| ⑩    | 010903  | 2   | Grease nipple $\frac{1}{8}$ " BSP |
| ⑪    | 046284  | 1   | Swivel plate, side brush          |

## Right hand, side brush, raise/lower, top link

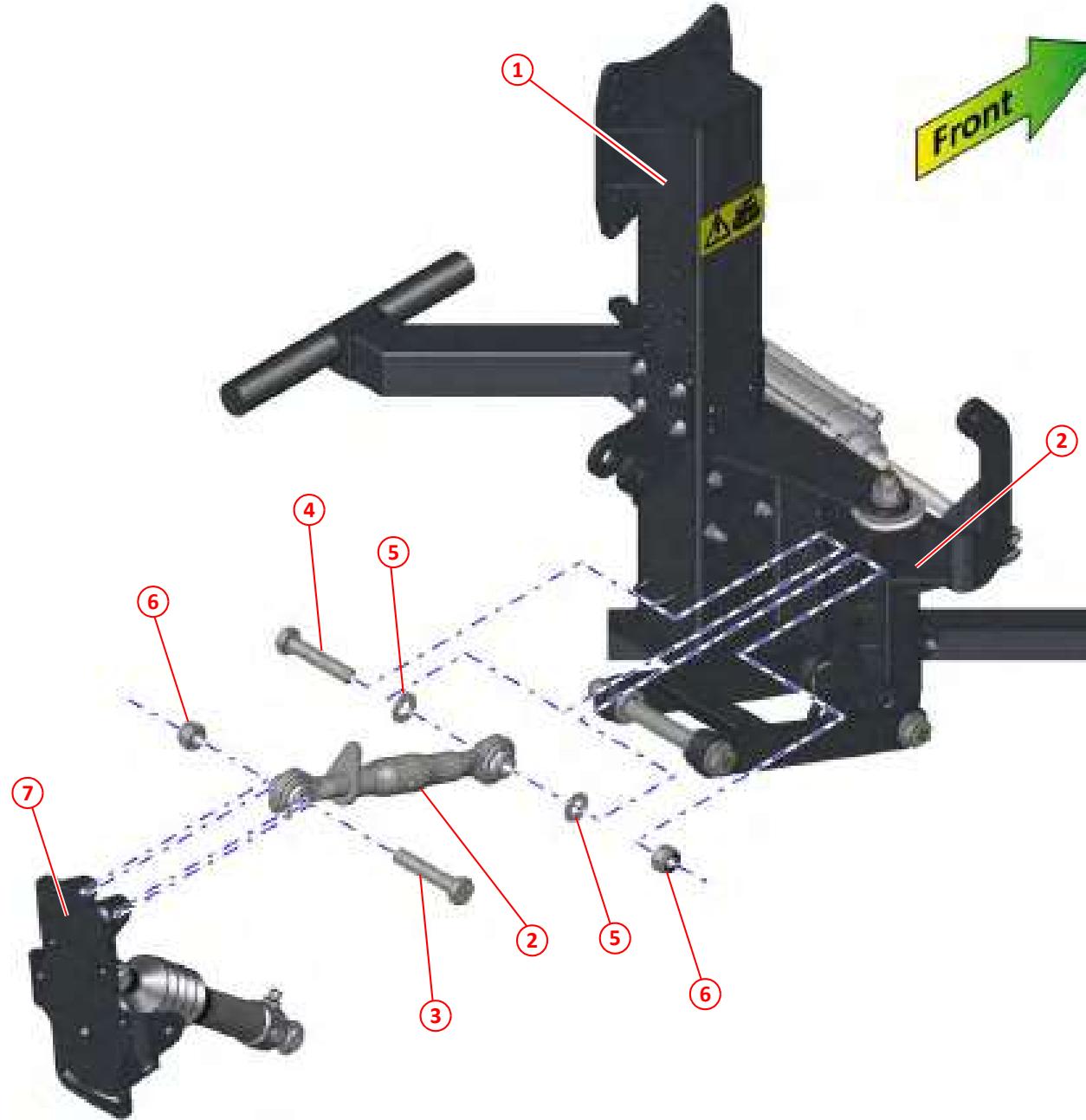


Figure 30: Right hand, side brush, raise/lower, top link

| Item | Part No | Qty | Description                      |  |
|------|---------|-----|----------------------------------|--|
| ①    | 046842  | 1   | Right hand leg                   |  |
| ②    | 047025  | 1   | King post, right hand side brush |  |
| ③    | 013011  | 1   | Top link (turnbuckle)            |  |
| ④    | 011140  | 2   | Bolt M18 x 90                    |  |
| ⑤    | 011138  | 2   | Plain washer M18                 |  |
| ⑥    | 011139  | 2   | Nyloc nut T M18                  |  |
| ⑦    | 046284  | 1   | Swivel plate, side brush         |  |

## Right hand, side brush, raise/lower, ram

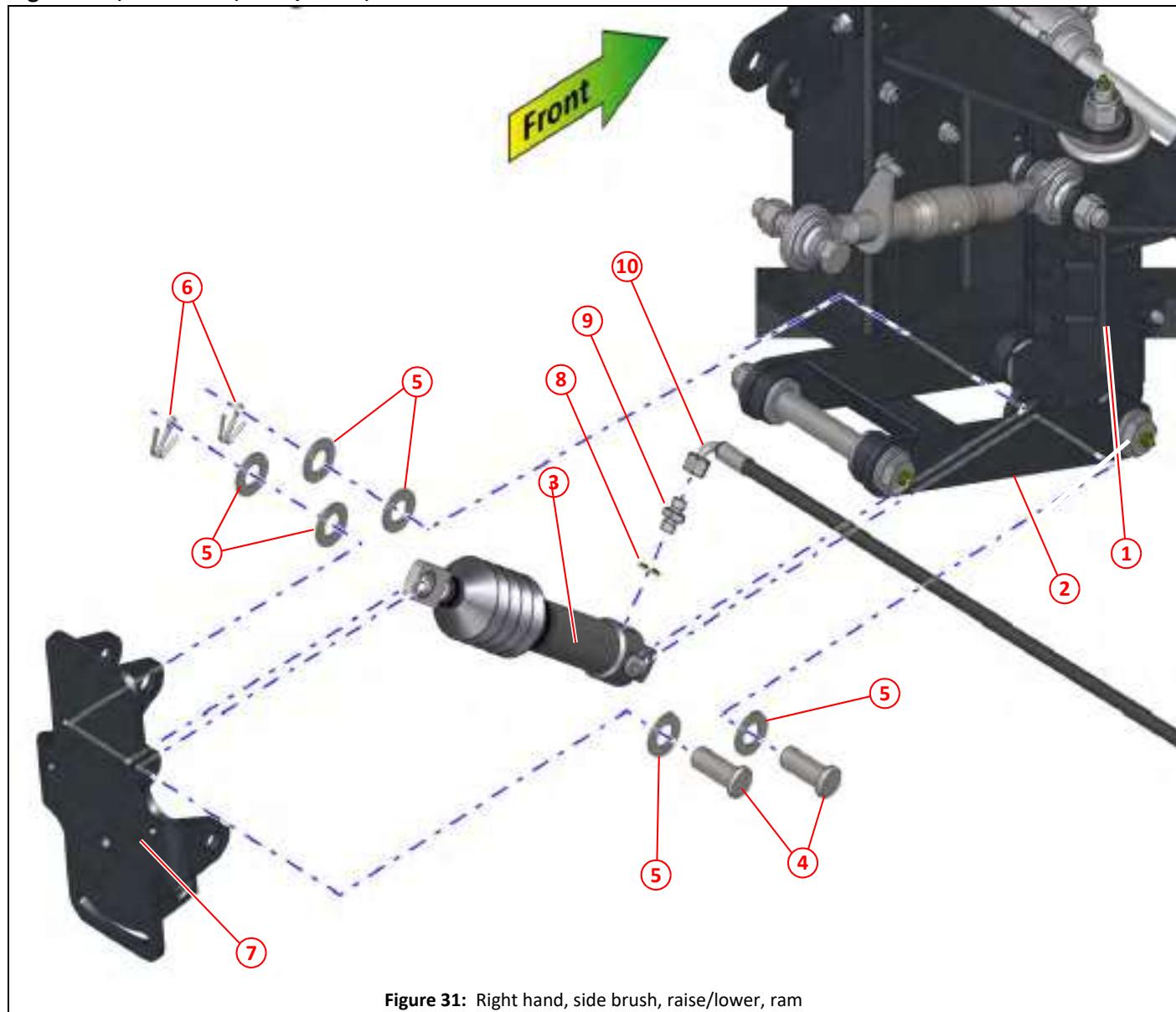


Figure 31: Right hand, side brush, raise/lower, ram

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 047025  | 1   | King post, right hand side brush   |
| ②    | 014801  | 1   | Brush link, side brush   |
| ③    | 024539  | 1   | Ram No. 12 240/340 assembly  |
| ④    | 046750  | 2   | Clevis pin, Ø20 x 50   |
| ⑤    | 011102  | 6   | Washer, plain, M20   |
| ⑥    | 011122  | 2   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ "                                   |
| ⑦    | 046284  | 1   | Swivel plate, side brush   |
| ⑧    | 011152  | 1   | Dowty seal $\frac{1}{4}$ " BSP   |
| ⑨    | 012539  | 1   | Restrictor No 5 $\frac{1}{4}$ " BSP x $\frac{1}{4}$ " BSP $\frac{1}{32}$ " white |
| ⑩    | 001371  | 1   | Hose $\frac{1}{4}$ " BSP x 1225, straight and 90°                                |

## Right hand, side brush, raise/lower, swivel plate

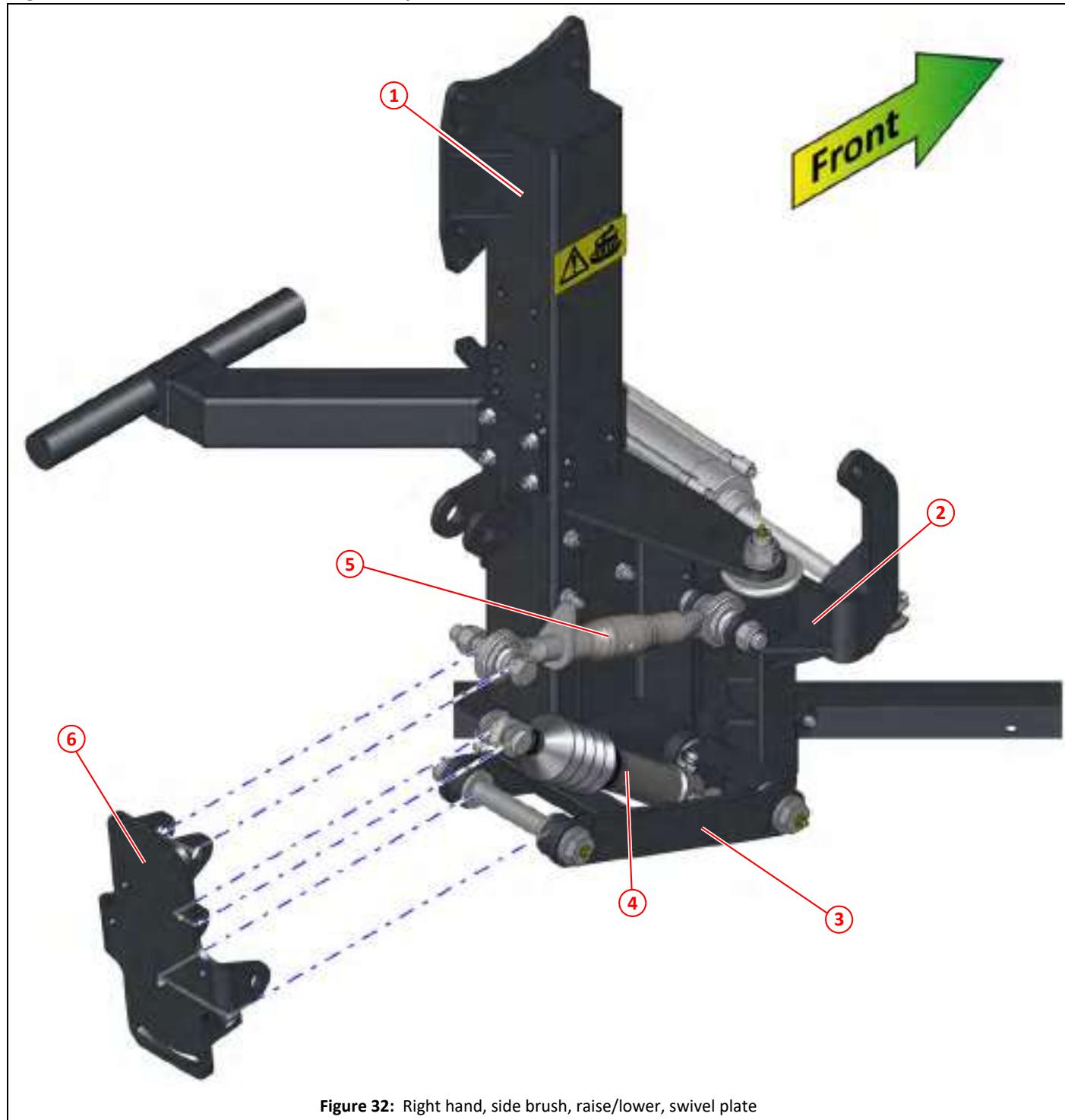
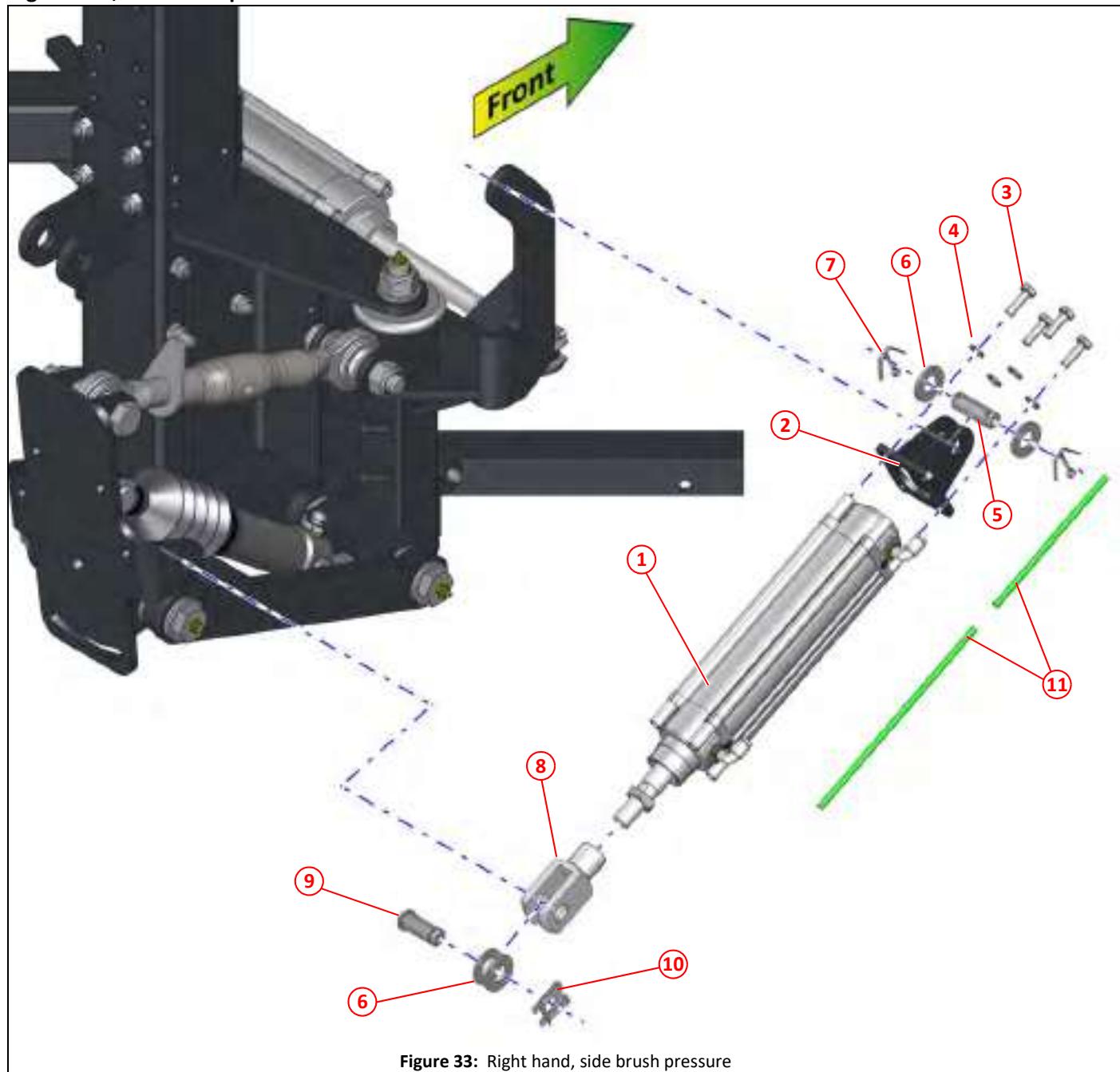


Figure 32: Right hand, side brush, raise/lower, swivel plate

| Item | Part No | Qty | Description                      |
|------|---------|-----|----------------------------------|
| ①    | 046842  | 1   | Right hand leg                   |
| ②    | 047025  | 1   | King post, right hand side brush |
| ③    | 014801  | 1   | Brush link, side brush           |
| ④    | 013011  | 1   | Top link (turnbuckle)            |
| ⑤    | 024539  | 1   | Ram No. 12 240/340 assembly      |
| ⑥    | 046284  | 1   | Swivel plate, side brush         |

**Right hand, side brush pressure**


| Item | Part No | Qty | Description                                    |
|------|---------|-----|--|
| ①    | 020298  | 1   | Pneumatic cylinder 50 x 160                    |
| ②    | 023122  | 1   | Pivot, cylinder mount bracket                  |
| ③    | 011011  | 4   | Setscrew M8 x 25                               |
| ④    | 011093  | 4   | Spring washer M8                               |
| ⑤    | 023123  | 1   | Pin ø16 x 46                                   |
| ⑥    | 011135  | 4   | Washer, plain, M16                             |
| ⑦    | 011122  | 2   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ " |
| ⑧    | 020299  | 1   | Clevis, pneumatic, M16 x 1.5                   |
| ⑨    | 022673  | 1   | Clevis pin (turned)                            |
| ⑩    | 022674  | 1   | Retaining clip M16                             |
| ⑪    | 024650  | 2   | 6mm green air pipe, length as required         |

## Right hand, side brush, hose tidy

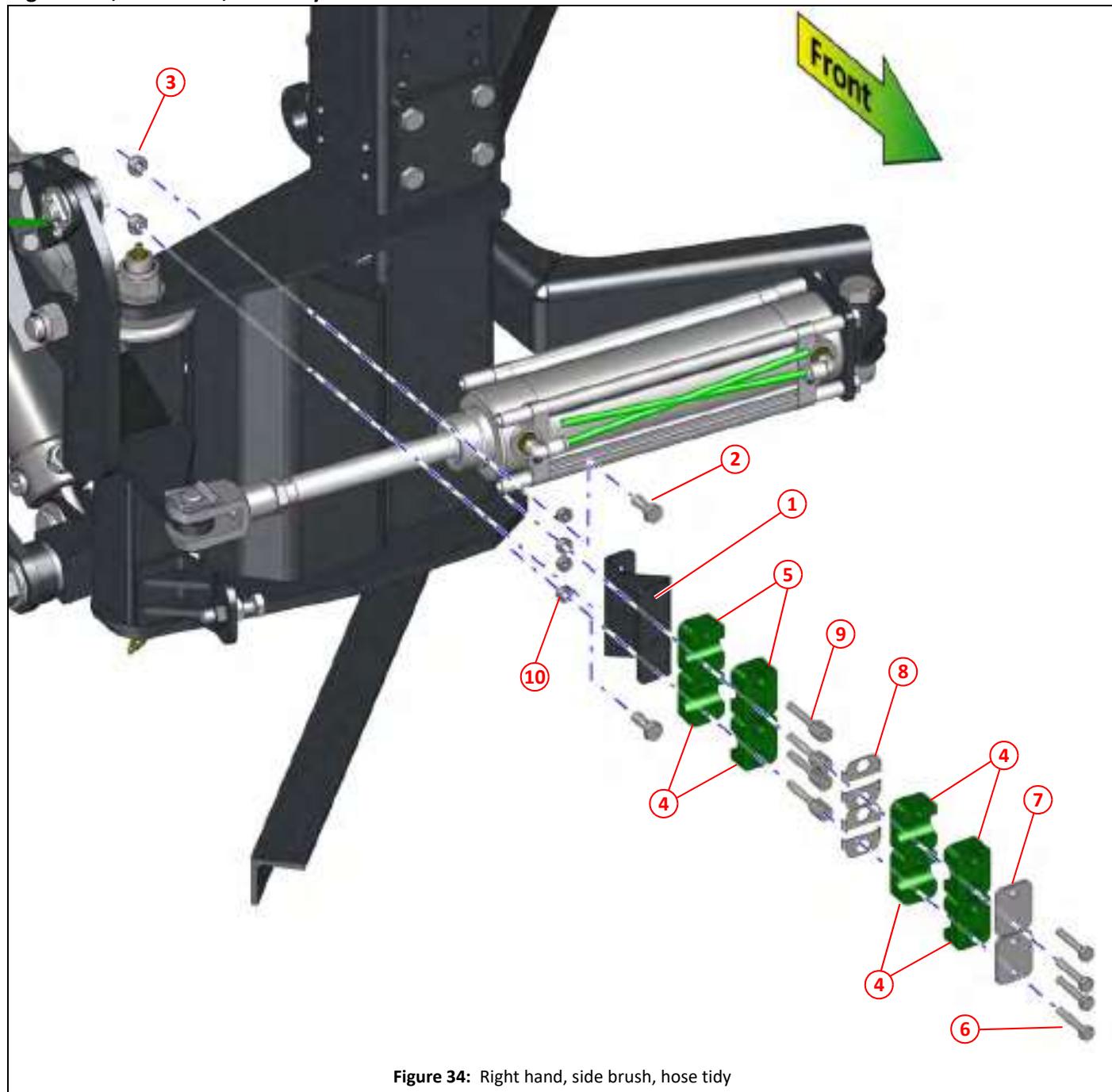
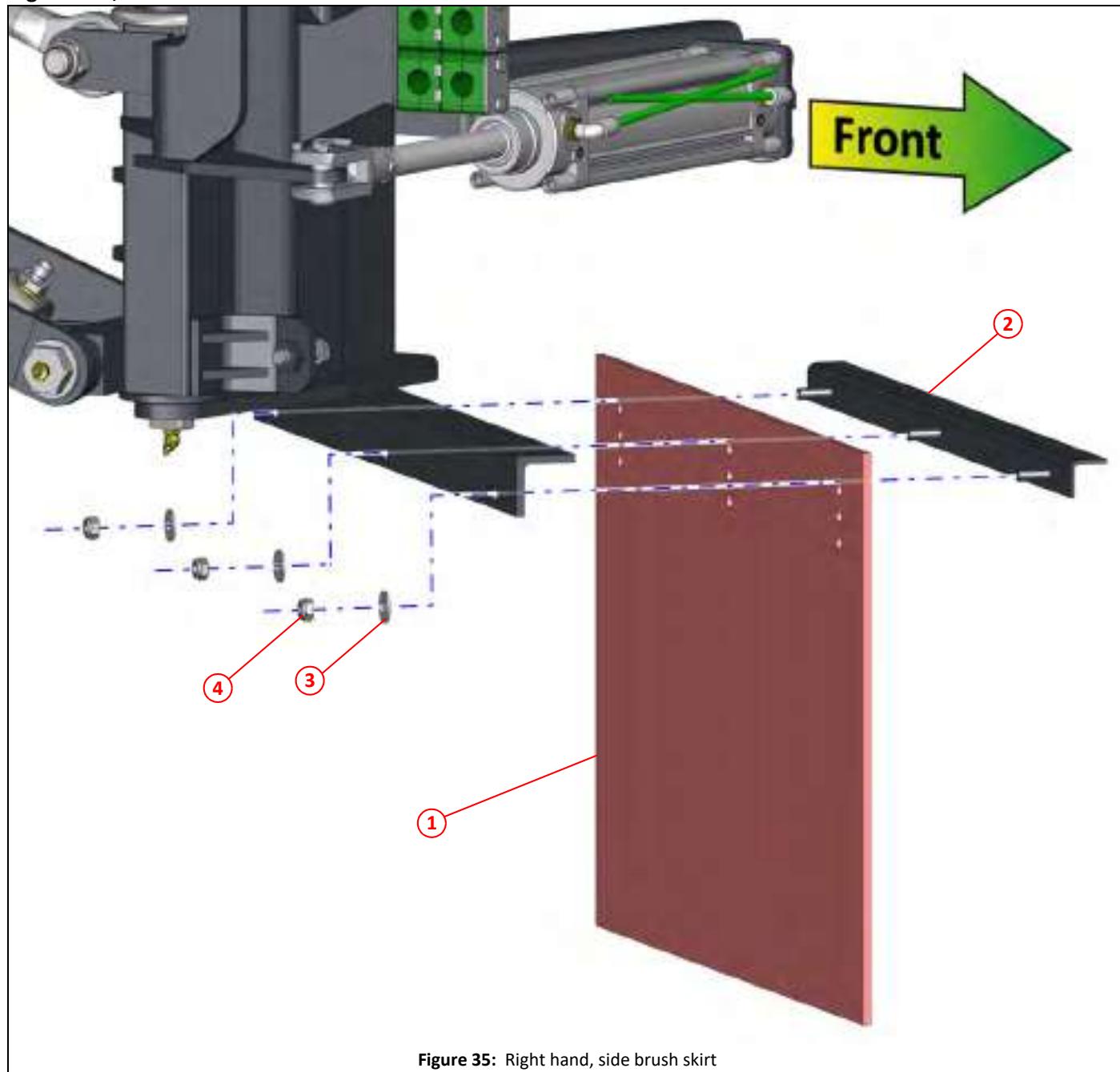


Figure 34: Right hand, side brush, hose tidy

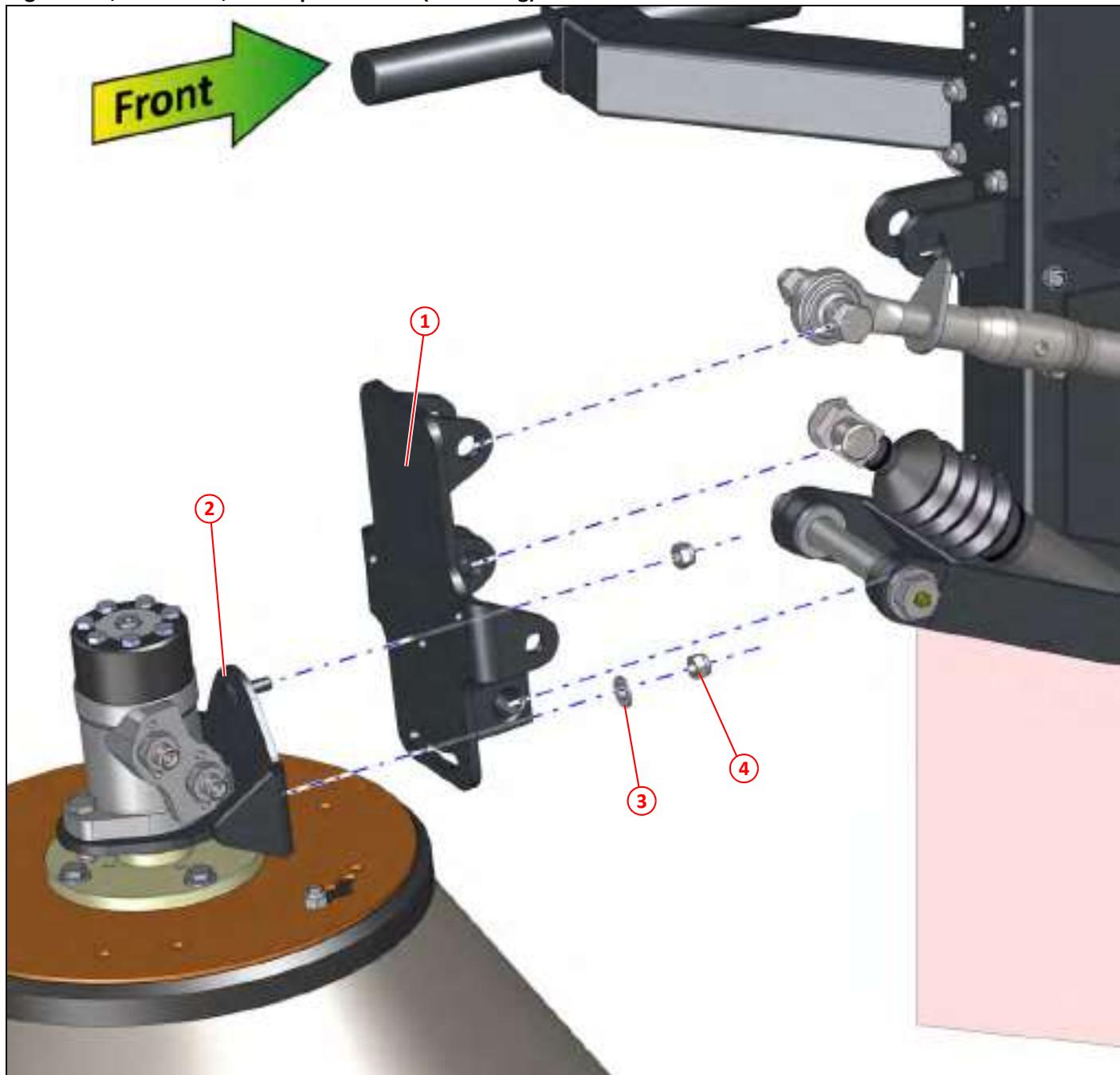
| Item | Part No | Qty | Description                             |
|------|---------|-----|---|
| ①    | 047229  | 1   | Right hand leg, hose tidy               |
| ②    | 011010  | 2   | Set screw M8 x 20                       |
| ③    | 011073  | 2   | Nyloc nut T M8                          |
| ④    | 002163  | 6   | Pipe clamp block, 17.2 single pipe/hose |
| ⑤    | 031316  | 2   | Pipe clamp block, 1/4" single pipe/hose |
| ⑥    | 011068  | 4   | Bolt M6 x 35                            |
| ⑦    | 031317  | 2   | Clamp plate flat                        |
| ⑧    | 000472  | 4   | Locking plate SIG1                      |
| ⑨    | 000470  | 4   | Stacking bolt, 35mm (AF4)               |
| ⑩    | 011071  | 4   | Nyloc nut T M6                          |

## Right hand, side brush skirt



| Item | Part No | Qty | Description                            |
|------|---------|-----|--|
| ①    | 010247  | 1   | Skirt, side brush, 3-pitch, heavy duty |
| ②    | 010275  | 1   | Skirt clamp                            |
| ③    | 011092  | 3   | Washer, plain, M8                      |
| ④    | 011073  | 3   | Nyloc nut T M8                         |

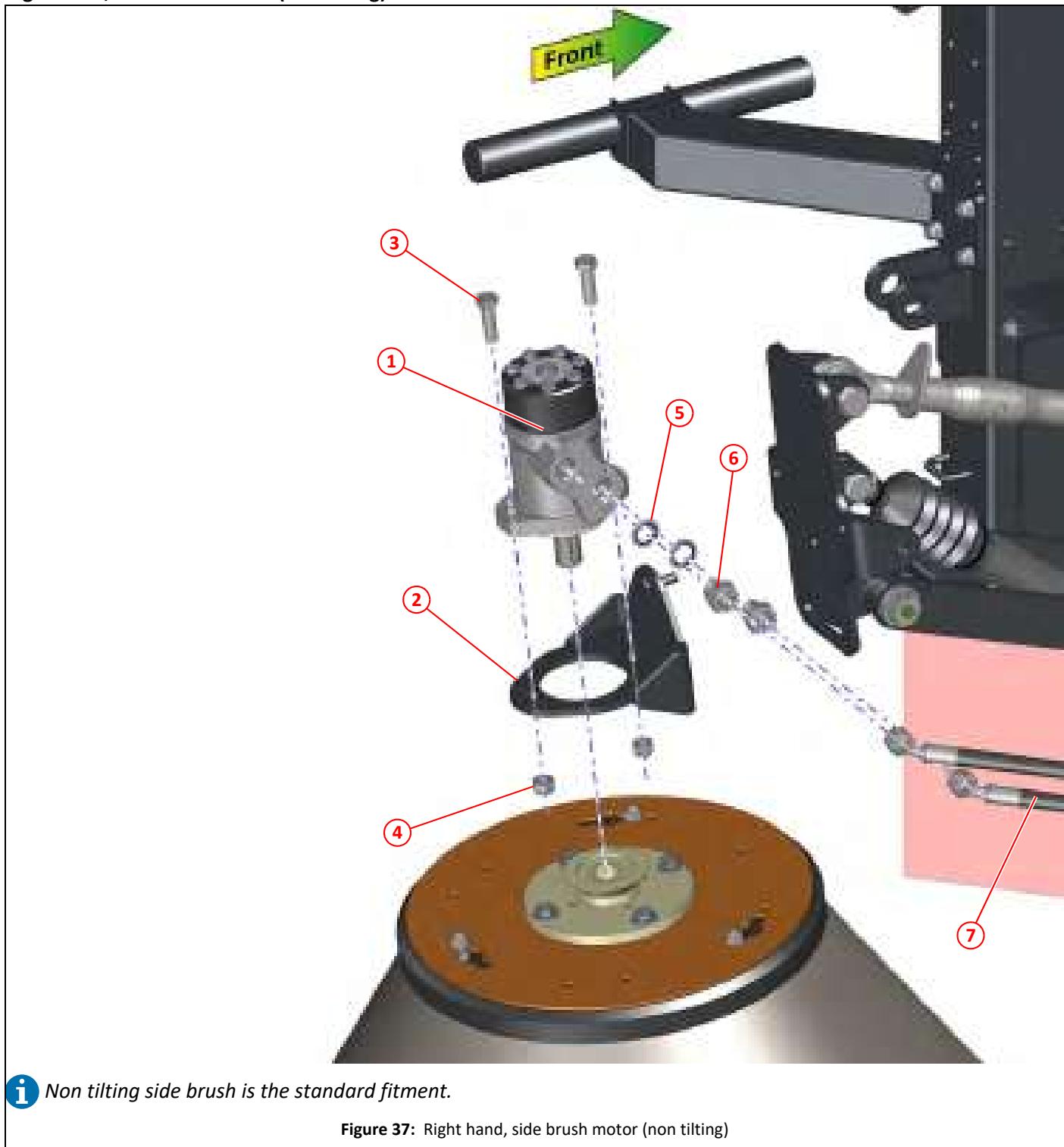
## Right hand, side brush, swivel plate attach (non tilting)



**i** Non tilting side brush is the standard fitment.

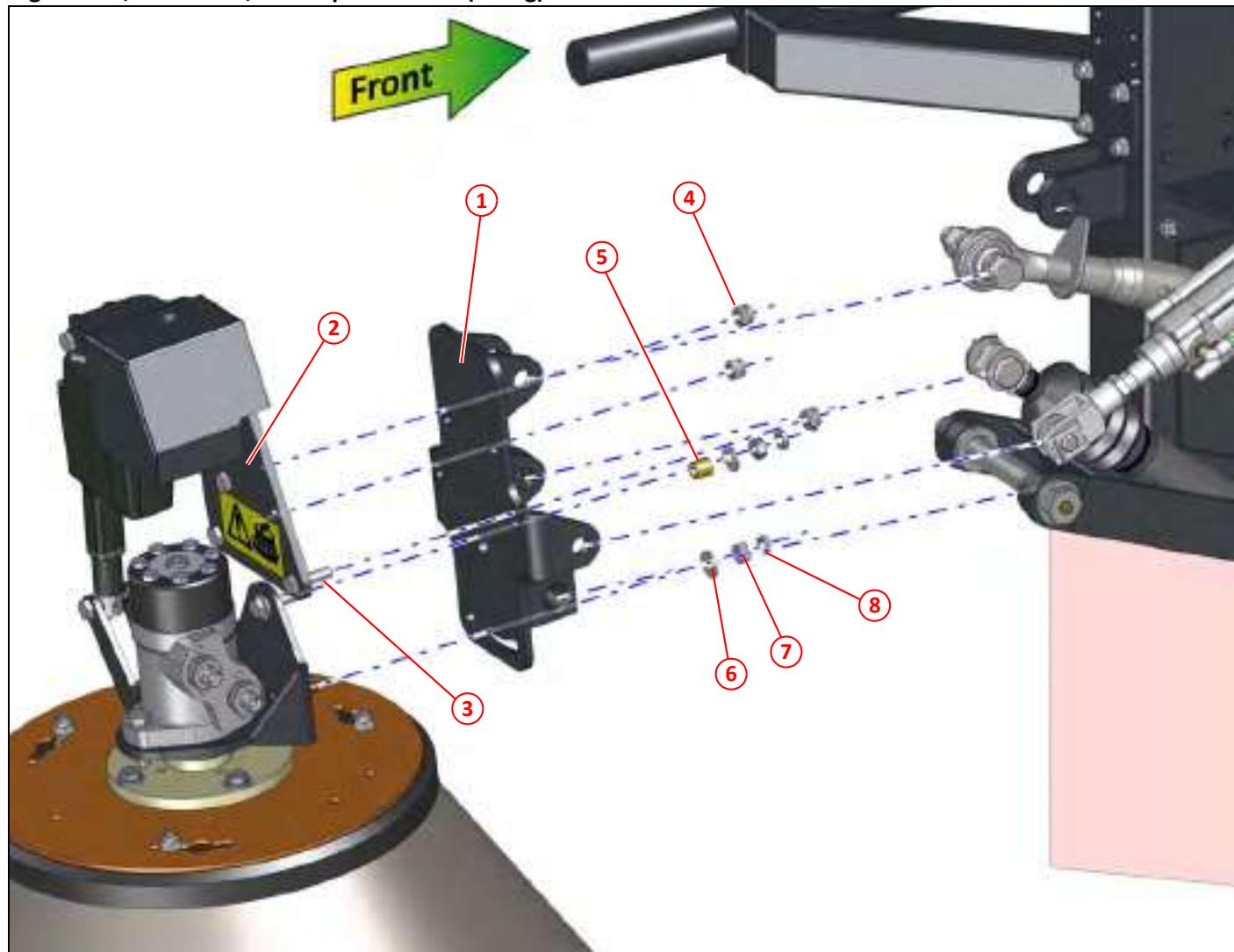
Figure 36: Right hand, side brush, swivel plate attach (non tilting)

| Item | Part No | Qty | Description               |
|------|---------|-----|---------------------------|
| ①    | 046284  | 1   | Swivel plate, side brush  |
| ②    | 010007  | 1   | Motor bracket, side brush |
| ③    | 011094  | 1   | Washer, plain, M10        |
| ④    | 011075  | 2   | Nyloc nut T M10           |

**Right hand, side brush motor (non tilting)**


| Item | Part No | Qty | Description                                       |  |
|------|---------|-----|---|--|
| ①    | 010749  | 1   | Motor 3597 (OMP 200)                              |  |
| ②    | 010007  | 1   | Motor bracket, side brush                         |  |
| ③    | 011069  | 2   | Bolt M12 x 40                                     |  |
| ④    | 011077  | 2   | Nyloc nut T M12                                   |  |
| ⑤    | 011154  | 2   | Dowty seal $\frac{1}{2}$ " BSP                    |  |
| ⑥    | 011167  | 2   | Adapter $\frac{1}{2}$ " x $\frac{3}{8}$ " BSP     |  |
| ⑦    | 001372  | 2   | Hose $\frac{3}{8}$ " BSP x 1400, straight and 45° |  |

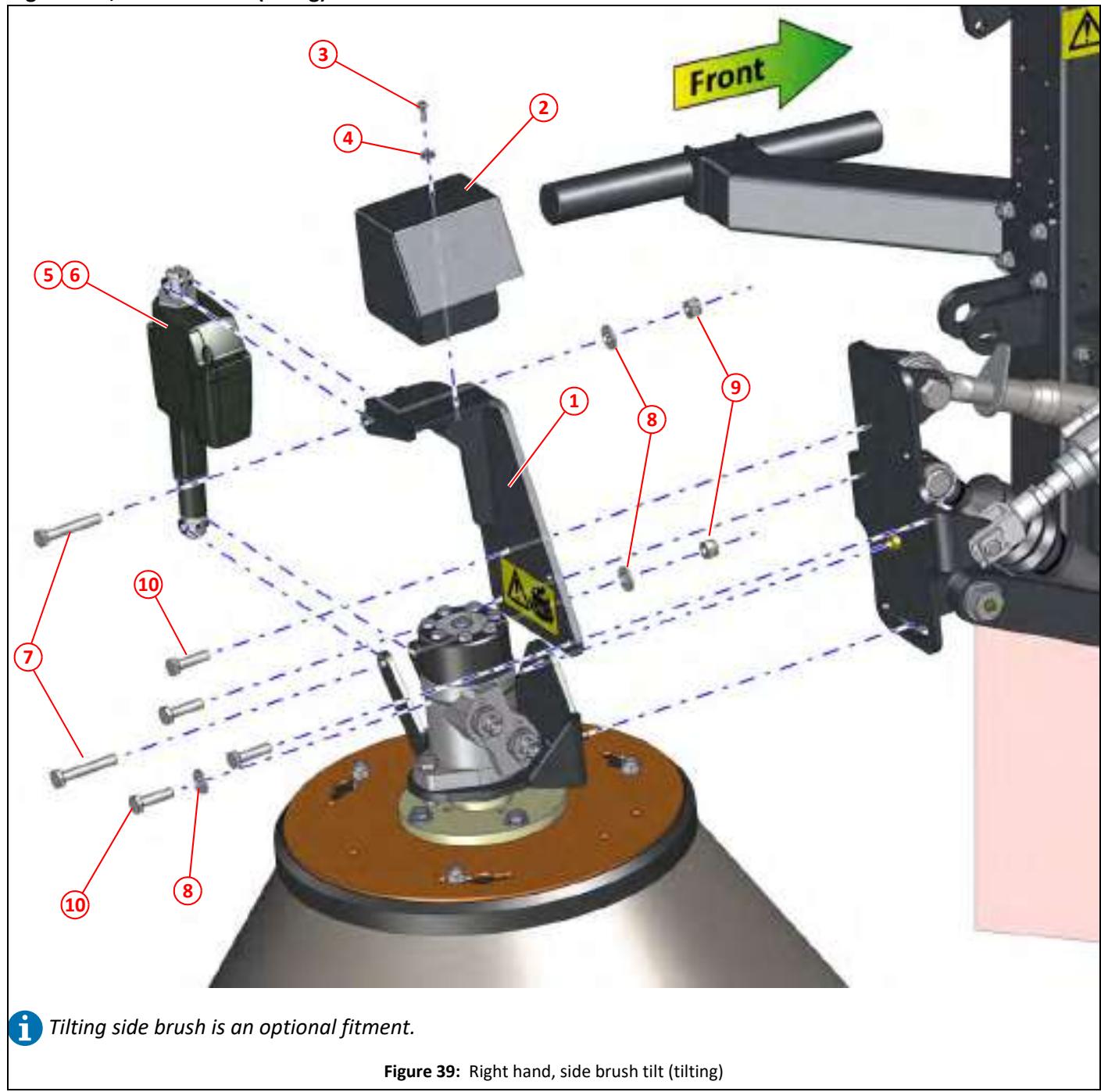
## Right hand, side brush, swivel plate attach (tilting)



**i** Tilting side brush is an optional fitment.

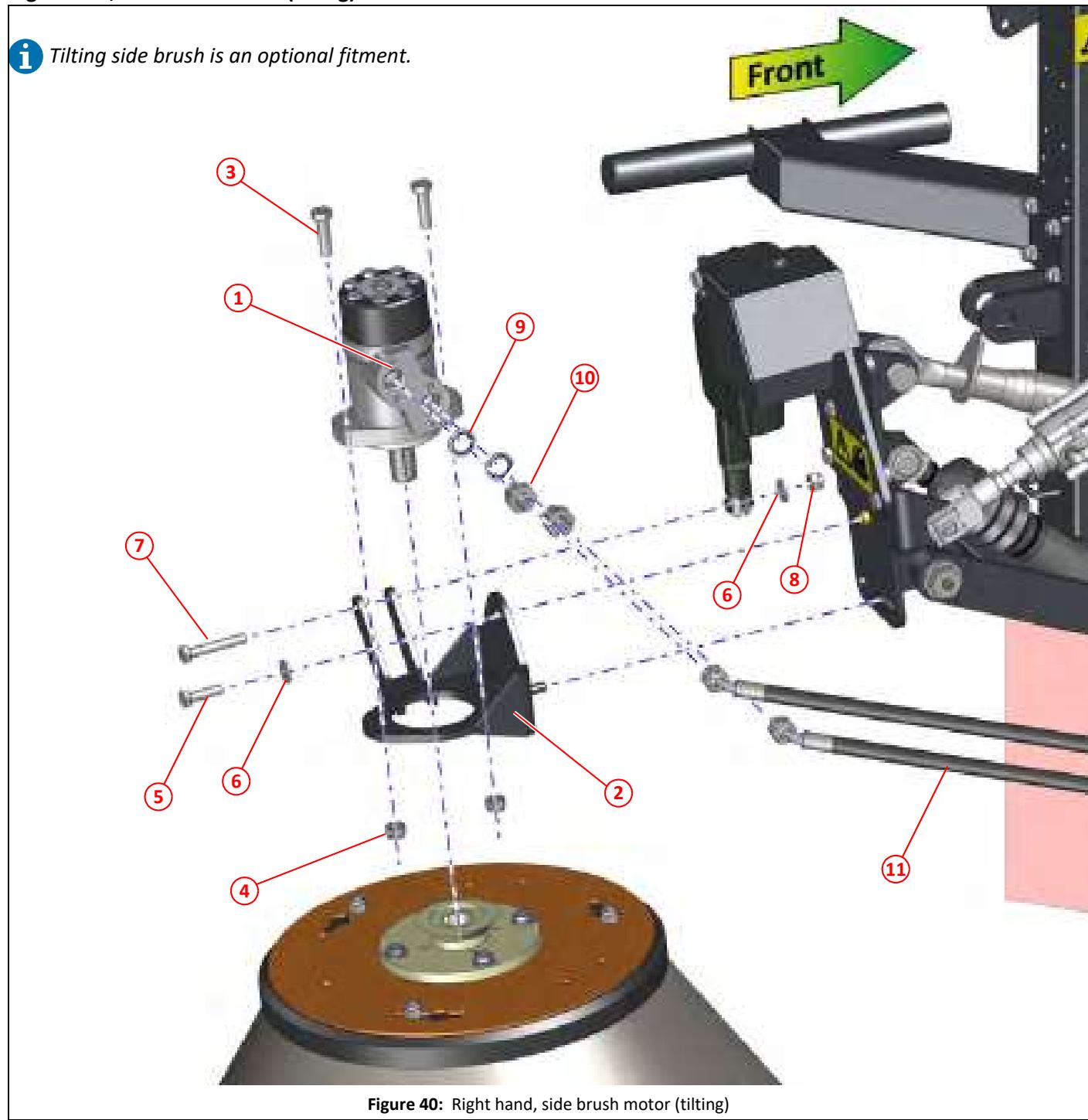
Figure 38: Right hand, side brush, swivel plate attach (tilting)

| Item | Part No | Qty | Description                    |  |
|------|---------|-----|--------------------------------|--|
| ①    | 046284  | 1   | Swivel plate, side brush       |  |
| ②    | 046280  | 1   | Brush tilt bracket, right hand |  |
| ③    | 011033  | 4   | Setscrew M10 x 35              |  |
| ④    | 011075  | 3   | Nyloc nut T M10                |  |
| ⑤    | 046282  | 1   | Bush 16 x 10.5 x 15            |  |
| ⑥    | 011094  | 2   | Washer, plain, M10             |  |
| ⑦    | 011074  | 2   | Full nut M10                   |  |
| ⑧    | 000506  | 2   | Half nut M10                   |  |

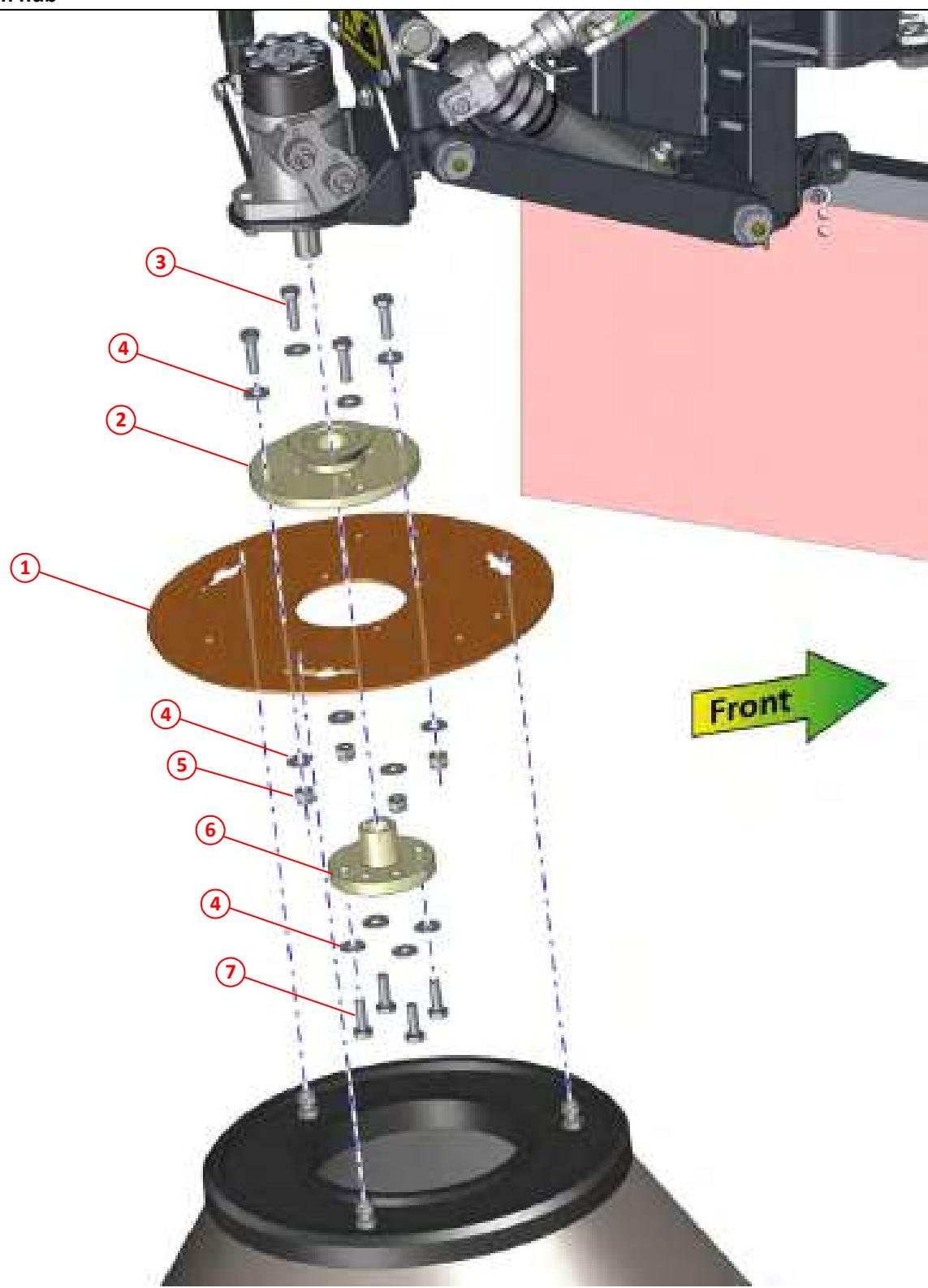
**Right hand, side brush tilt (tilting)**

**Figure 39:** Right hand, side brush tilt (tilting)

| Item | Part No | Qty | Description                                     |
|------|---------|-----|---|
| ①    | 046280  | 1   | Brush tilt bracket, right hand                  |
| ②    | 046492  | 1   | Actuator cover, right hand                      |
| ③    | 000373  | 1   | Socket dome head screw M6 x 16, stainless steel |
| ④    | 000254  | 1   | Plain washer, M6, stainless steel               |
| ⑤    | 046270  | 1   | LA25/100 Actuator (12V)                         |
| ⑥    | 047660  | 1   | LA25/100 Actuator (24V)                         |
| ⑦    | 011036  | 2   | Bolt M10 x 60                                   |
| ⑧    | 011094  | 3   | Plain washer, M10                               |
| ⑨    | 011075  | 2   | Nyloc nut T M10                                 |
| ⑩    | 011033  | 4   | Setscrew M10 x 35                               |

## Right hand, side brush motor (tilting)

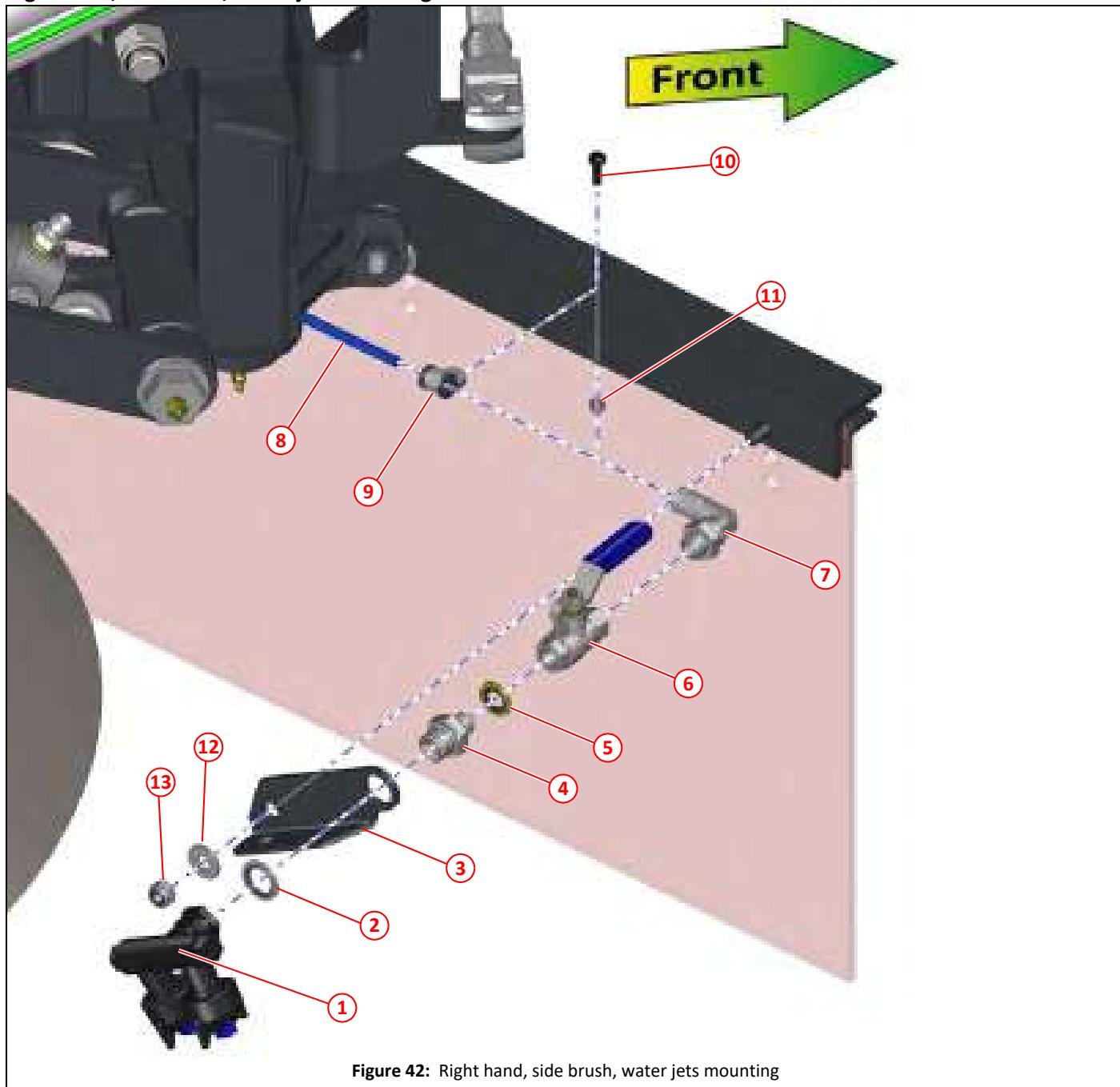


| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 010749  | 1   | Motor 3597 (OMP 200)                                  |
| ②    | 047579  | 1   | Motor bracket tilting side brush, bolt hub, left hand |
| ③    | 011069  | 2   | Bolt M12 x 40   |
| ④    | 011077  | 2   | Nyloc nut T M12                                       |
| ⑤    | 011033  | 1   | Setscrew M10 x 35                                     |
| ⑥    | 011094  | 2   | Plain washer, M10                                     |
| ⑦    | 011036  | 1   | Bolt M10 x 60   |
| ⑧    | 011075  | 1   | Nyloc nut T M10                                       |
| ⑨    | 011154  | 2   | Dowty seal $\frac{1}{2}$ " BSP                        |
| ⑩    | 011167  | 2   | Adapter $\frac{1}{2}$ " x $\frac{3}{8}$ " BSP         |
| ⑪    | 001372  | 2   | Hose $\frac{3}{8}$ " BSP x 1400, straight and 45°     |

**Right hand, side brush hub**

**Figure 41:** Right hand, side brush hub

| Item | Part No | Qty | Description                            |
|------|---------|-----|--|
| ①    | 047484  | 1   | Brush hub 7000 / side brush (bolt hub) |
| ②    | 047482  | 1   | Plate hub                              |
| ③    | 000462  | 4   | Setscrew M10 x 35, stainless steel     |
| ④    | 000270  | 12  | Plain washer, M10, stainless steel     |
| ⑤    | 011075  | 4   | Nyloc nut T M10                        |
| ⑥    | 047481  | 1   | Sprung hub                             |
| ⑦    | 000461  | 4   | Setscrew M10 x 30, stainless steel     |

## Right hand, side brush, water jets mounting



| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 036044  | 1   | Water jets, double swivel nozzle holder assembly                     |
| ②    | 011153  | 1   | Dowty seal $\frac{3}{8}$ " BSP                                       |
| ③    | 036043  | 1   | Nozzle bracket, twin nozzle  |
| ④    | 011199  | 1   | Adapter $\frac{3}{8}$ " BSP x $\frac{1}{4}$ " BSP                    |
| ⑤    | 011152  | 1   | Dowty seal $\frac{1}{4}$ " BSP                                       |
| ⑥    | 011743  | 1   | Valve, ball, $\frac{1}{4}$ " BSP                                     |
| ⑦    | 047602  | 1   | Adapter, angle, 90° push in 10mm x $\frac{1}{4}$ " BSP               |
| ⑧    | 041031  | 1   | Blue flexible nylon tubing, $\varnothing$ 10mm, (length as required) |
| ⑨    | 021914  | 1   | P-clip $\varnothing$ 12mm, rubber sealed                             |
| ⑩    | 000234  | 1   | Setscrew, pan head pozidriv, M5 x 16, black                          |
| ⑪    | 000155  | 1   | Nyloc nut M5   |
| ⑫    | 011092  | 1   | Plain washer M8  |
| ⑬    | 011073  | 1   | Nyloc nut T M8   |

## Dual water jets, side brush

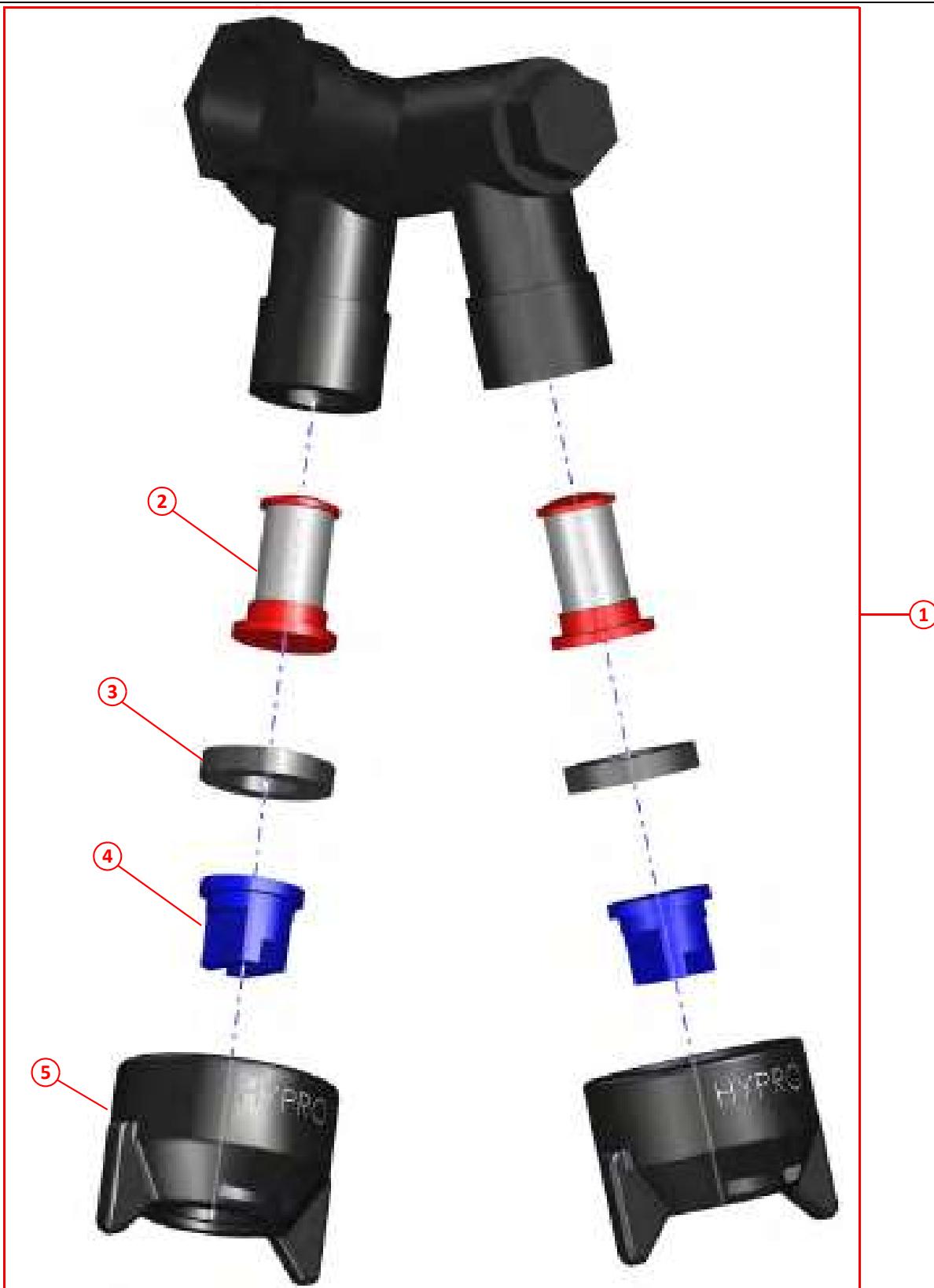


Figure 43: Dual water jets, side brush tilt

| Item | Part No | Qty | Description                                      |
|------|---------|-----|--|
| ①    | 036044  | 1   | Water jets, double swivel nozzle holder assembly |
| ②    | 030633  | 2   | Filter, 100 mesh                                 |
| ③    | 030636  | 2   | Rubber washer                                    |
| ④    | 030748  | 2   | Jet, blue  |
| ⑤    | 030746  | 2   | Nozzle cap                                       |

## Brushes, side

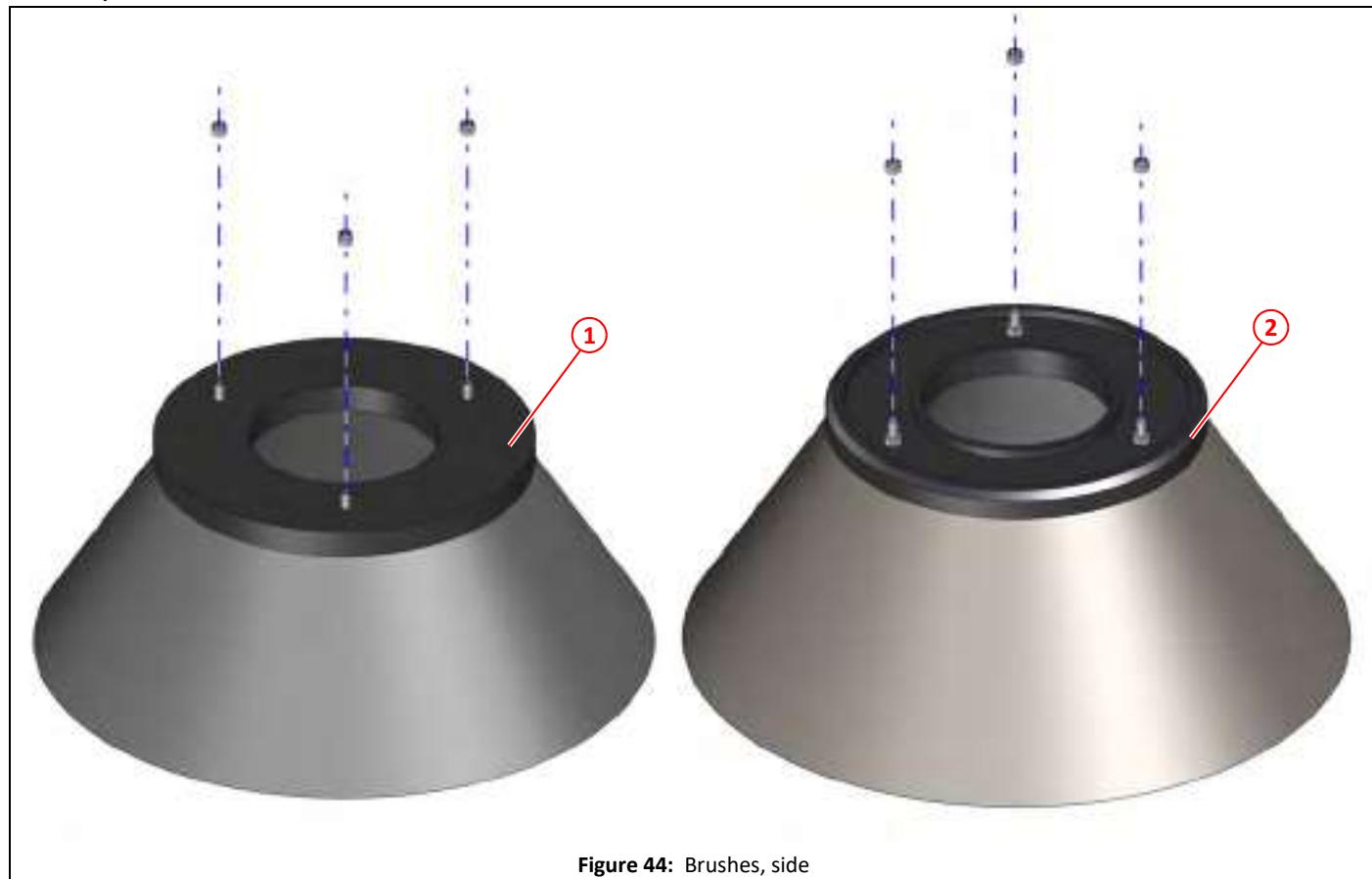
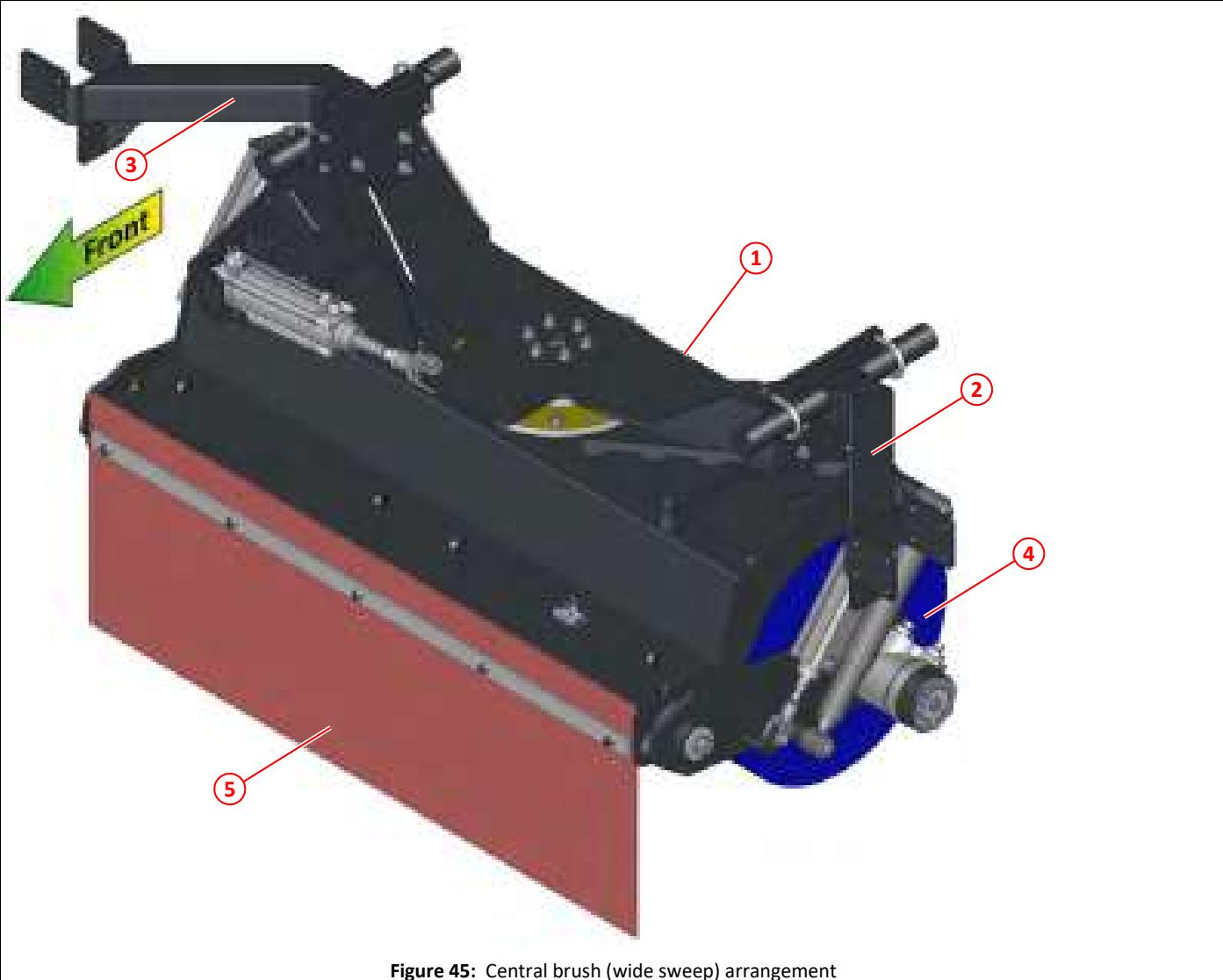


Figure 44: Brushes, side

| Item | Part No | Qty | Description                   |
|------|---------|-----|-------------------------------|
| ①    | 023473  | 1   | Brush, side ø400 - ø650 steel |
| ②    | 040136  | 1   | Brush, side ø400 - ø700 steel |

**Central brush (wide sweep) arrangement**


| Item | Part No | Qty | Description                                      | File |
|------|---------|-----|--|------|
| ①    | 037316  | 1   | Central brush (wide sweep) assembly              |      |
| ②    | 034334  | 1   | Central brush (wide sweep) adjustabar left hand  |      |
| ③    | 034335  | 1   | Central brush (wide sweep) adjustabar right hand |      |
| ④    | 037588  | 1   | Brush assembly, central brush (wide sweep)       |      |
| ⑤    | 022516  | 1   | Skirt, central brush (wide sweep)                |      |

## Central brush (wide sweep) mounting

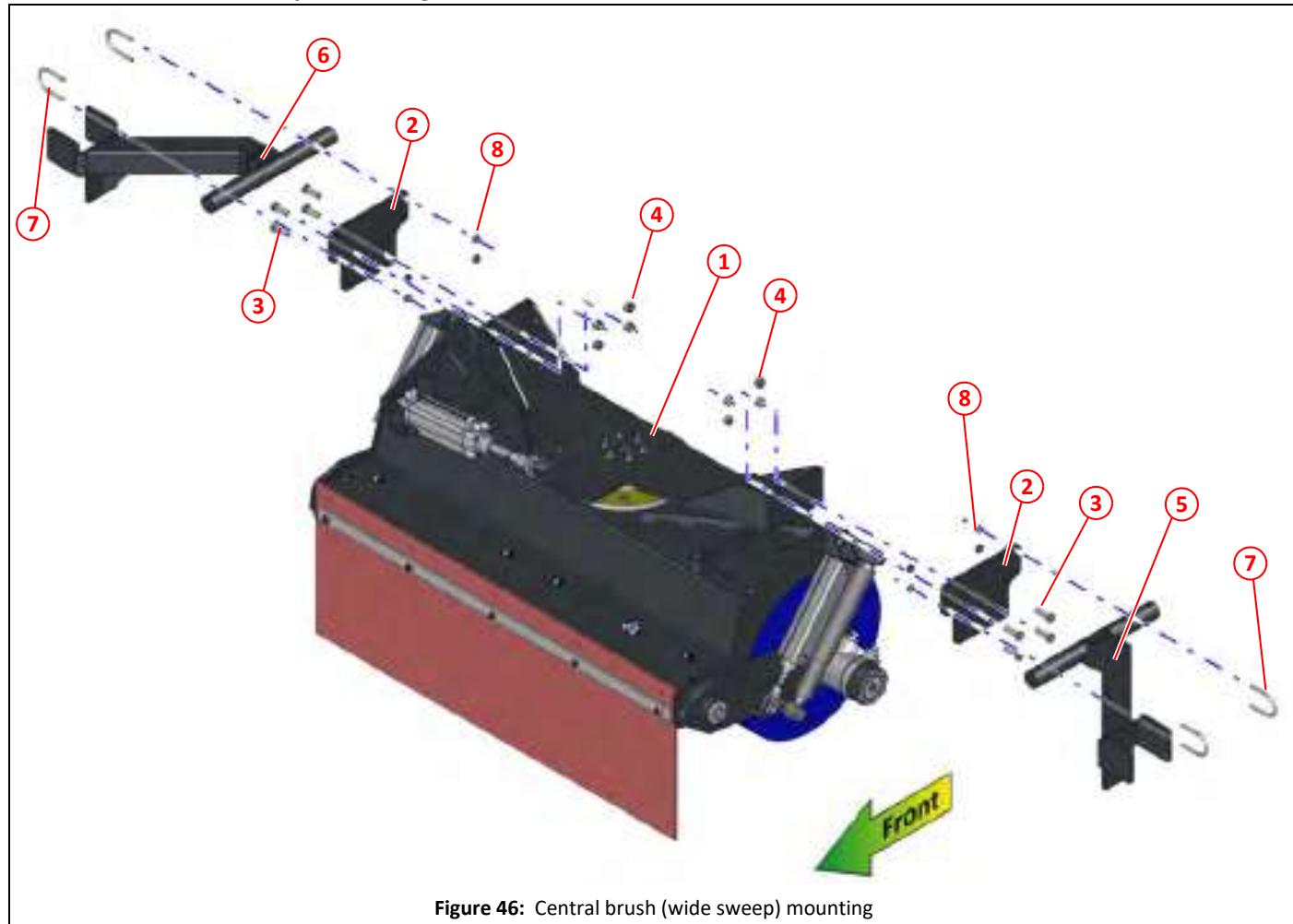
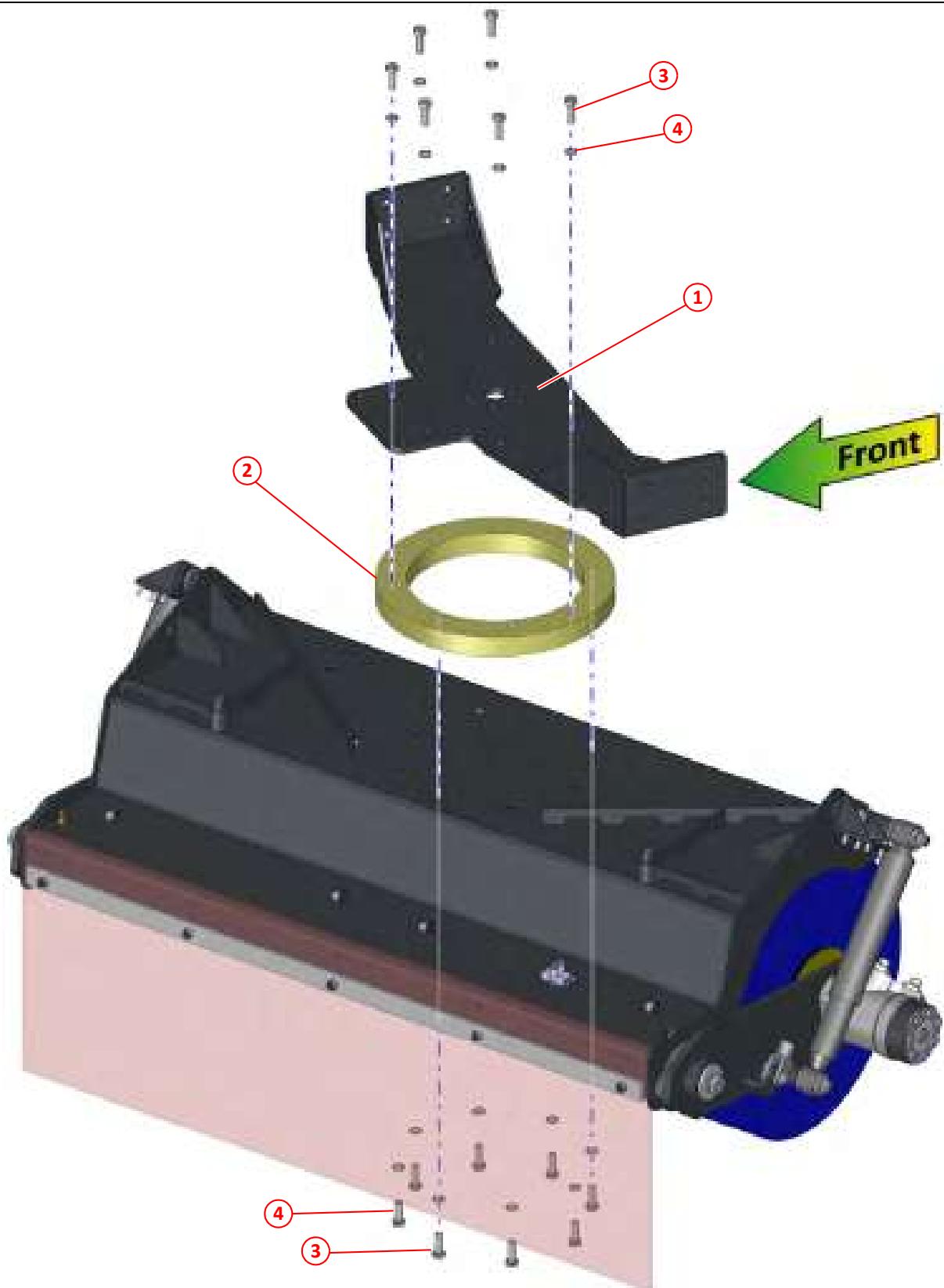


Figure 46: Central brush (wide sweep) mounting

| Item | Part No | Qty | Description                                      |
|------|---------|-----|--|
| ①    | 037316  | 1   | Central brush (wide sweep) assembly              |
| ②    | 034336  | 2   | Central brush (wide sweep) drop plate            |
| ③    | 011053  | 8   | Setscrew M12 x 35                                |
| ④    | 011077  | 8   | Nyloc nut T M12                                  |
| ⑤    | 034334  | 1   | Central brush (wide sweep) adjustabar left hand  |
| ⑥    | 034335  | 1   | Central brush (wide sweep) adjustabar right hand |
| ⑦    | 014983  | 4   | 'U' clamp $1\frac{5}{8}$ "                       |
| ⑧    | 000185  | 8   | Nut M8, plain faced flange, plated               |

**Central brush (wide sweep) support - fixed slew**

**Figure 47:** Central brush (wide sweep) support - fixed slew

| Item | Part No | Qty | Description   |  |
|------|---------|-----|---|--|
| ①    | 024155  | 1   | Central brush (wide sweep) support bracket          |  |
| ②    | 020919  | 1   | Central brush (wide sweep) adapter ring, fixed slew |  |
| ③    | 011032  | 14  | Setscrew M10 x 30                                   |  |
| ④    | 011095  | 14  | Spring washer M10                                   |  |

## Central brush (wide sweep) support slewing

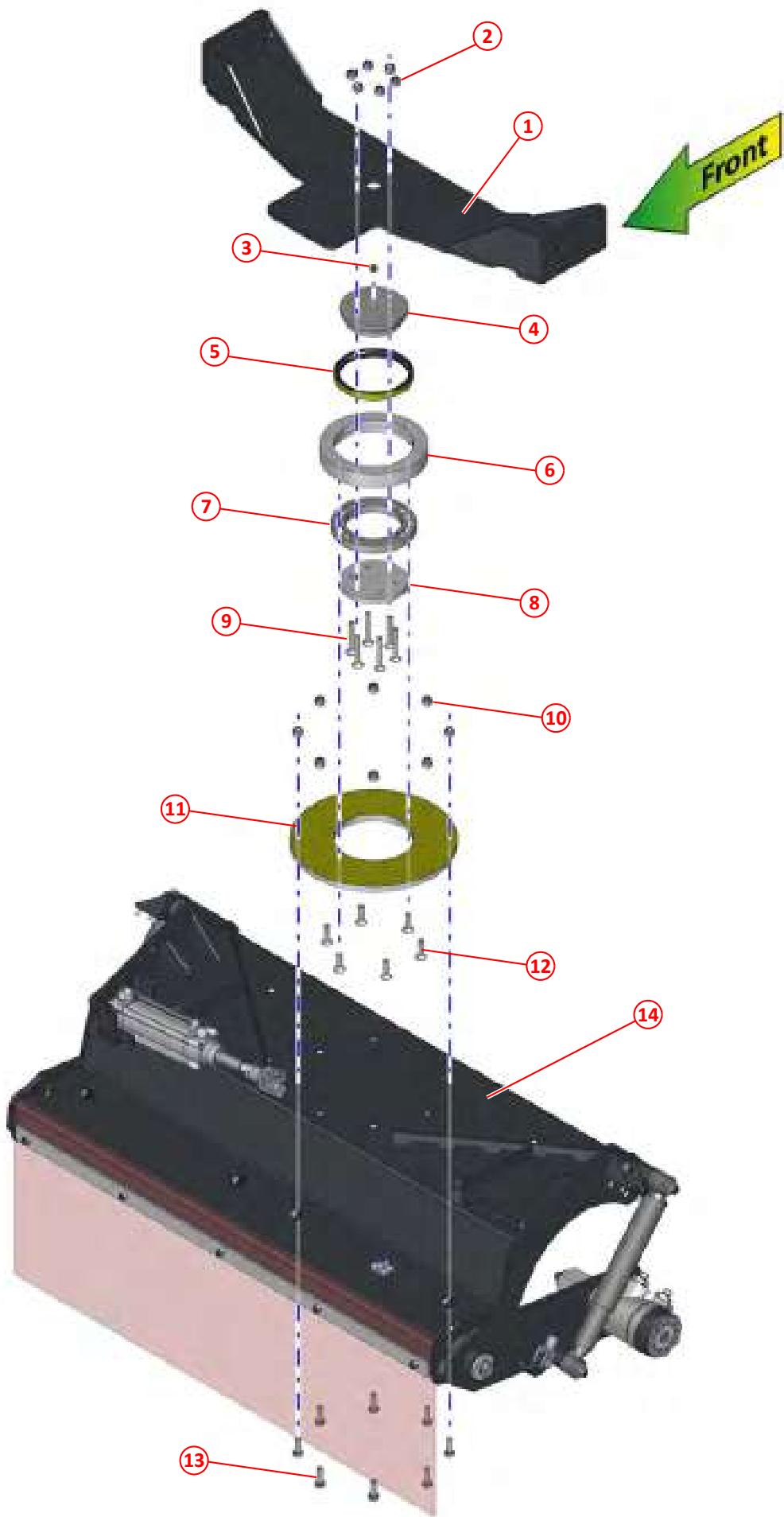


Figure 48: Central brush (wide sweep) support slewing

| Item | Part No | Qty | Description                                |  |
|------|---------|-----|--|--|
| ①    | 024155  | 1   | Central brush (wide sweep) support bracket |  |
| ②    | 011075  | 6   | Nyloc nut T M10                            |  |
| ③    | 010903  | 1   | Grease nipple $\frac{1}{8}$ " BSP straight |  |
| ④    | 024150  | 1   | Spigot                                     |  |
| ⑤    | 024148  | 1   | Oil seal 120 x 140 x 13                    |  |
| ⑥    | 024152  | 1   | Bearing housing                            |  |
| ⑦    | 024149  | 1   | Bearing, ball 100 x 150 x 16 (16020)       |  |
| ⑧    | 024151  | 1   | Clamp plate                                |  |
| ⑨    | 000183  | 6   | Screw, countersunk, socket head M10 x 65   |  |
| ⑩    | 011075  | 8   | Nyloc nut T M10                            |  |
| ⑪    | 024154  | 1   | Clamp ring                                 |  |
| ⑫    | 000546  | 6   | Screw, countersunk, M10 x 35               |  |
| ⑬    | 011032  | 8   | Setscrew M10 x 30                          |  |
| ⑭    | 036216  | 1   | Central brush (wide sweep) cover           |  |

## Central brush (wide sweep) slewing ram

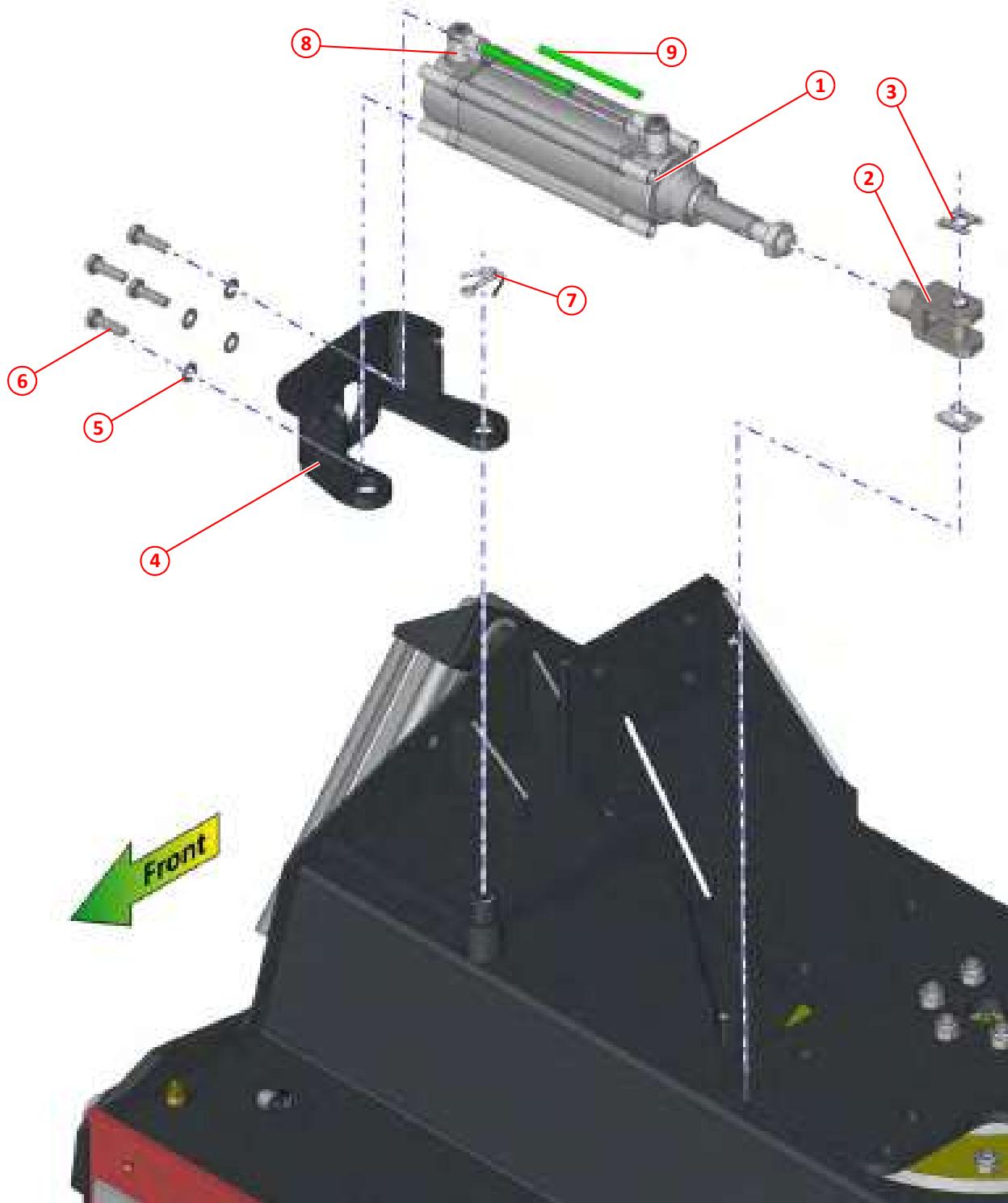
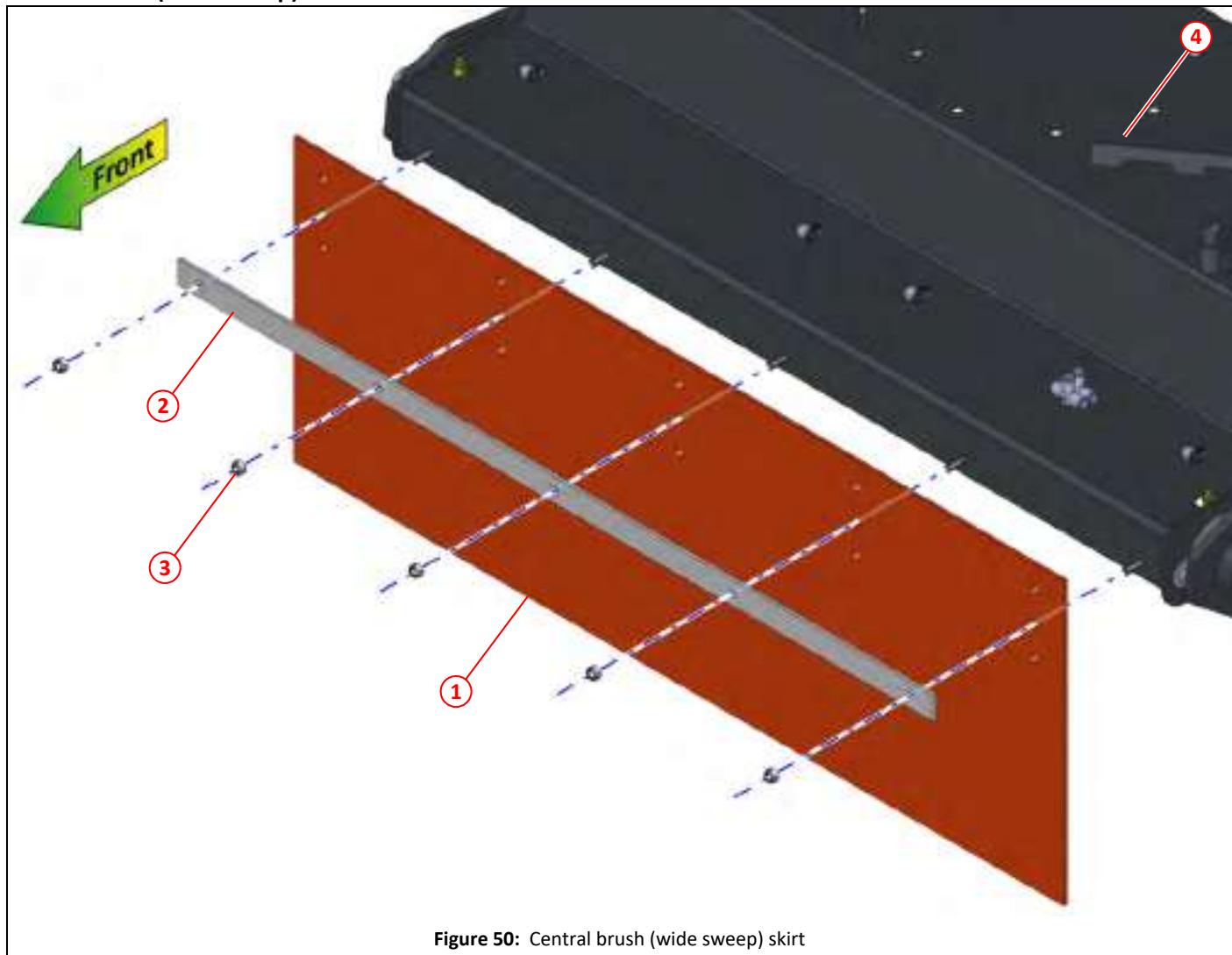


Figure 49: Central brush (wide sweep) slewing ram

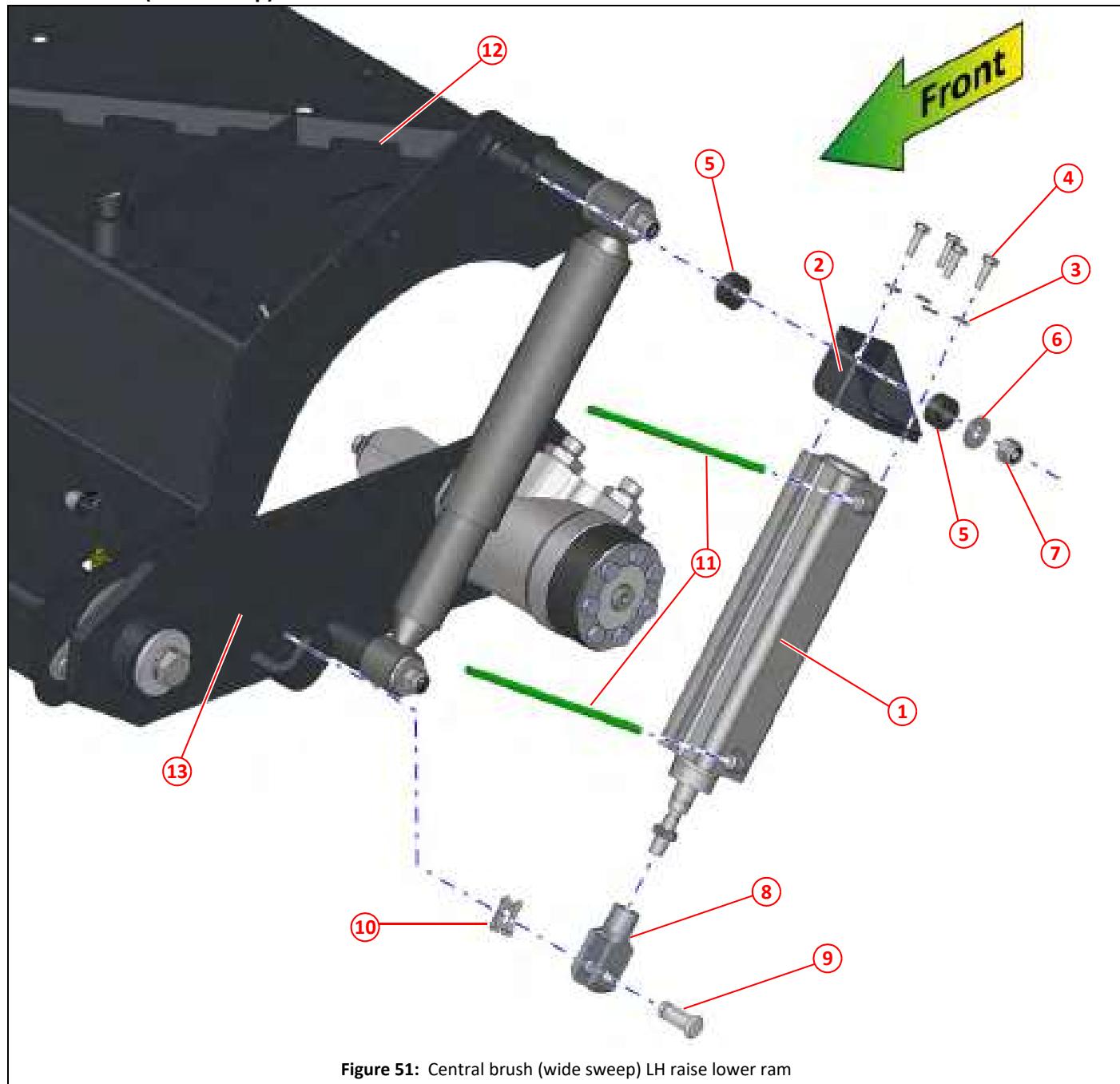
| Item | Part No | Qty | Description   |  |
|------|---------|-----|---|--|
| ①    | 020767  | 1   | Pneumatic cylinder ø50 x 100  |  |
| ②    | 036621  | 1   | Clevis special M16 neck with ø12 PIN  |  |
| ③    | 023269  | 2   | Safety fastener ø12   |  |
| ④    | 036620  | 1   | Mounting bracket for pneumatic cylinder, slewing central brush (wide sweep) |  |
| ⑤    | 011093  | 4   | Spring washer M8  |  |
| ⑥    | 011011  | 4   | Setscrew M8 x 25  |  |
| ⑦    | 011122  | 2   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ "                              |  |
| ⑧    | 021158  | 2   | Pneumatic flow regulator  |  |
| ⑨    | 024650  | 2   | 6mm green air pipe, length as required                                      |  |

**Central brush (wide sweep) skirt**


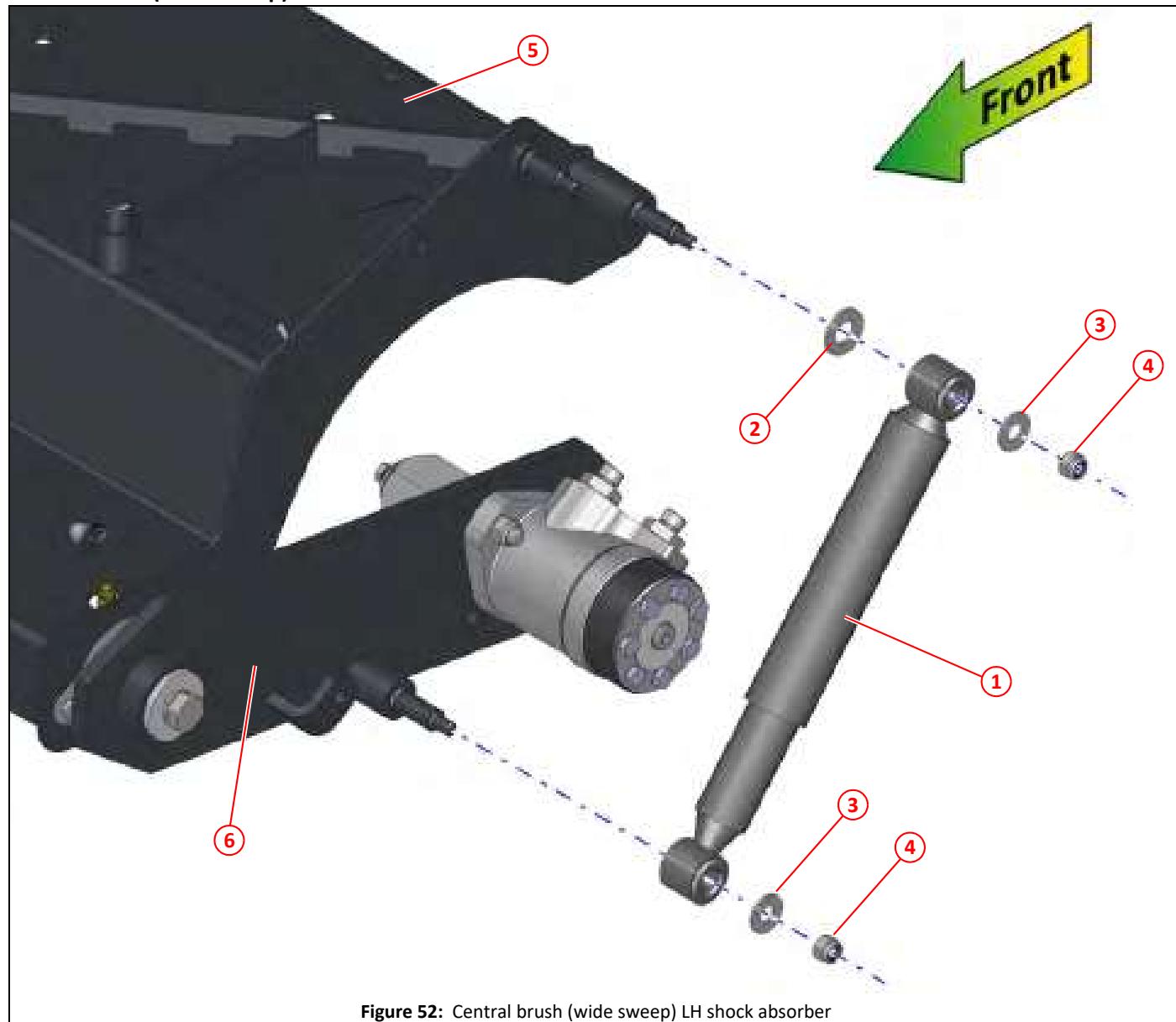
**Figure 50:** Central brush (wide sweep) skirt

| Item | Part No | Qty | Description                       | File |
|------|---------|-----|-----------------------------------|------|
| ①    | 022516  | 1   | Skirt, central brush              |      |
| ②    | 022517  | 1   | Clamp, central brush skirt        |      |
| ③    | 011073  | 5   | Nyloc nut T M8                    |      |
| ④    | 036216  | 1   | Cover, central brush (wide sweep) |      |

## Central brush (wide sweep) LH raise lower ram



| Item | Part No | Qty | Description                                      |
|------|---------|-----|--|
| ①    | 020602  | 1   | Pneumatic cylinder ø40 x 125                     |
| ②    | 030532  | 1   | Air ram mounting bracket, central brush          |
| ③    | 011091  | 4   | Spring washer M6                                 |
| ④    | 011067  | 4   | Setscrew M6 x 20                                 |
| ⑤    | 011000  | 2   | Hose $\frac{5}{8}$ ", fuel SAE100R6, cut to 11mm |
| ⑥    | 011094  | 1   | Plain washer M10                                 |
| ⑦    | 011075  | 1   | Nyloc nut T M10                                  |
| ⑧    | 014469  | 1   | Clevis M12                                       |
| ⑨    | 023270  | 1   | Clevis pin ø12                                   |
| ⑩    | 023269  | 1   | Safety fastener ø12                              |
| ⑪    | 024650  | 2   | 6mm green air pipe, length as required           |
| ⑫    | 036216  | 1   | Cover, central brush (wide sweep)                |
| ⑬    | 023077  | 1   | Motor plate LH                                   |

**Central brush (wide sweep) LH shock absorber**


| Item | Part No | Qty | Description                       |
|------|---------|-----|-----------------------------------|
| ①    | 014063  | 1   | Shock absorber 320/500            |
| ②    | 011135  | 1   | Plain washer M16                  |
| ③    | 011096  | 2   | Plain washer M12                  |
| ④    | 011075  | 2   | Nyloc nut T M10                   |
| ⑤    | 036216  | 1   | Cover, central brush (wide sweep) |
| ⑥    | 023077  | 1   | Motor plate LH                    |

## Central brush (wide sweep) LH drive motor

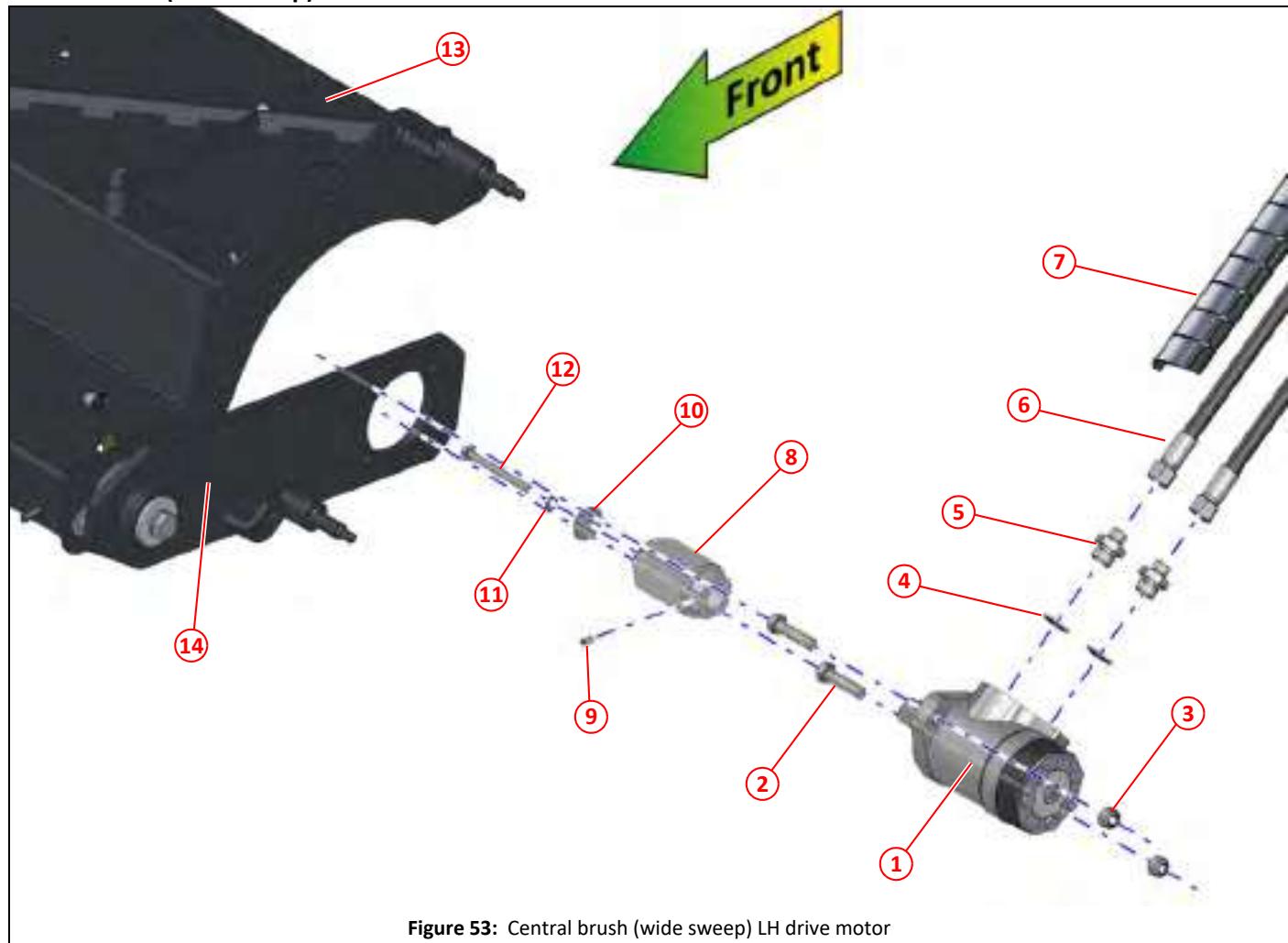
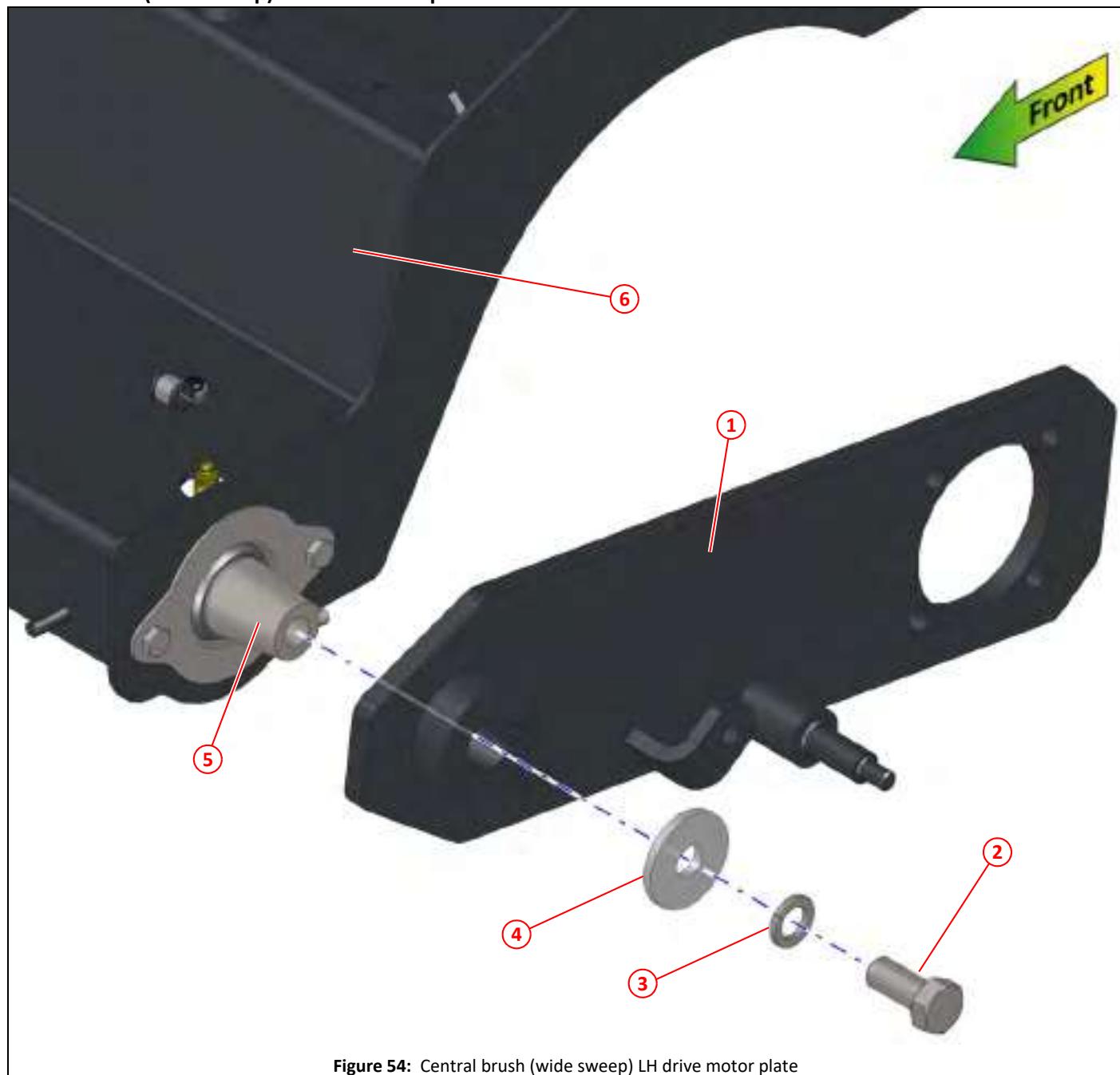


Figure 53: Central brush (wide sweep) LH drive motor

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 010566  | 1   | Motor 3596 (OMP 100)   |
| ②    | 011054  | 2   | Setscrew M12 x 45  |
| ③    | 011077  | 2   | Nyloc nut T M12  |
| ④    | 011154  | 2   | Dowty seal $\frac{1}{2}$ " BSP                               |
| ⑤    | 011167  | 2   | Adapter $\frac{1}{2}$ " BSP x $\frac{3}{8}$ " BSP            |
| ⑥    | 001167  | 2   | Hose $\frac{3}{8}$ " BSP x 1200, straight                    |
| ⑦    | 004161  | 1   | Flex cable conduit (split) OD 15.7mm, cut to length required |
| ⑧    | 024535  | 1   | Drive shaft  |
| ⑨    | 011112  | 1   | Socket setscrew M6 x 12                                      |
| ⑩    | 024538  | 1   | Cone washer  |
| ⑪    | 011093  | 1   | Spring washer M8   |
| ⑫    | 011415  | 1   | Bolt M8 x 80   |
| ⑬    | 036216  | 1   | Cover, central brush (wide sweep)                            |
| ⑭    | 023077  | 1   | Motor plate LH   |

**Central brush (wide sweep) LH drive motor plate**


| Item | Part No | Qty | Description                       | File |
|------|---------|-----|-----------------------------------|------|
| ①    | 023077  | 1   | Motor plate LH                    |      |
| ②    | 011141  | 1   | Bolt M16 x 35                     |      |
| ③    | 011142  | 1   | Spring washer M16                 |      |
| ④    | 013439  | 1   | Washer, ø50 x ø16.5 x 5           |      |
| ⑤    | 023080  | 1   | Shaft taper                       |      |
| ⑥    | 036216  | 1   | Cover, central brush (wide sweep) |      |

## Central brush (wide sweep) RH raise lower ram

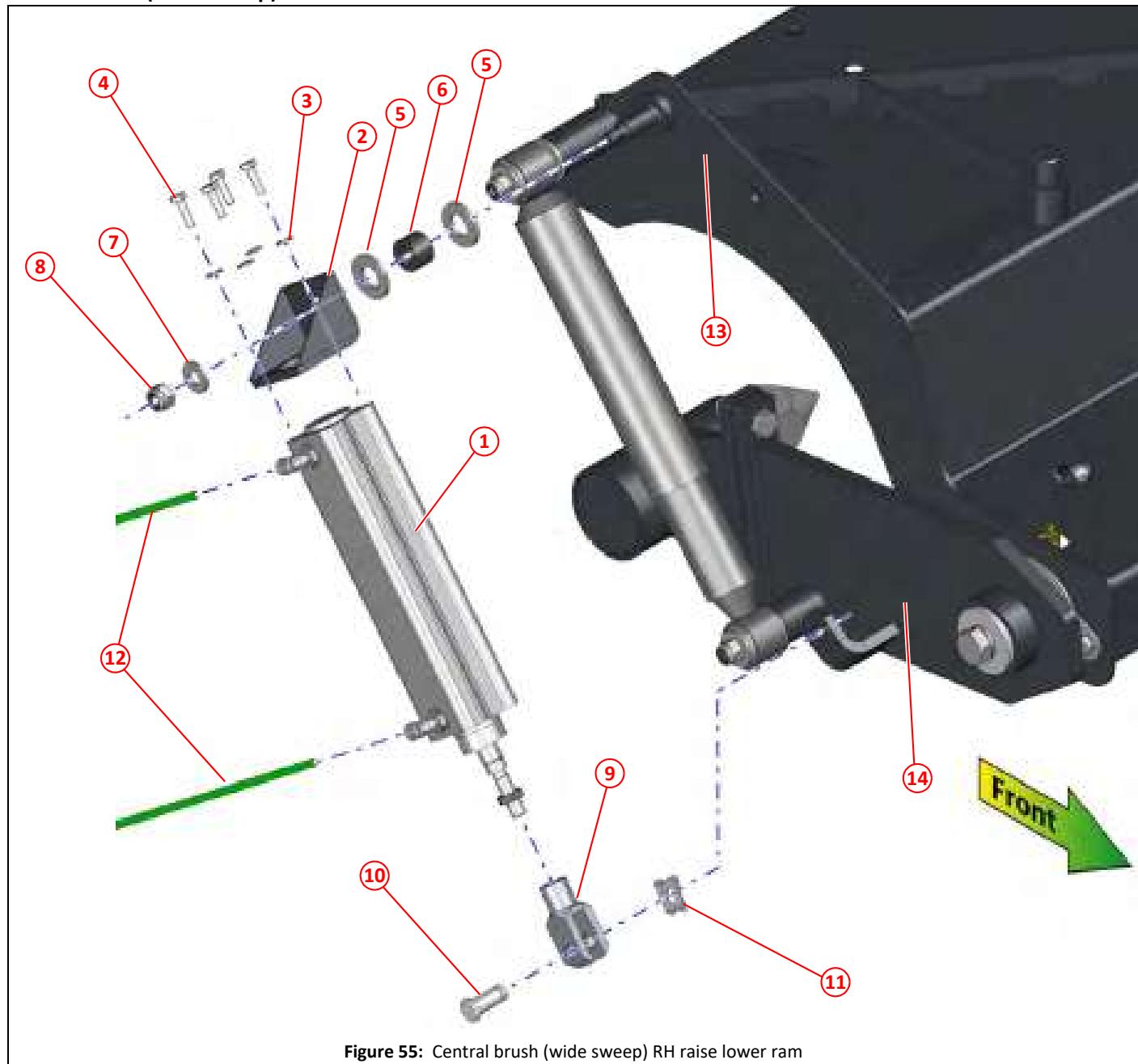
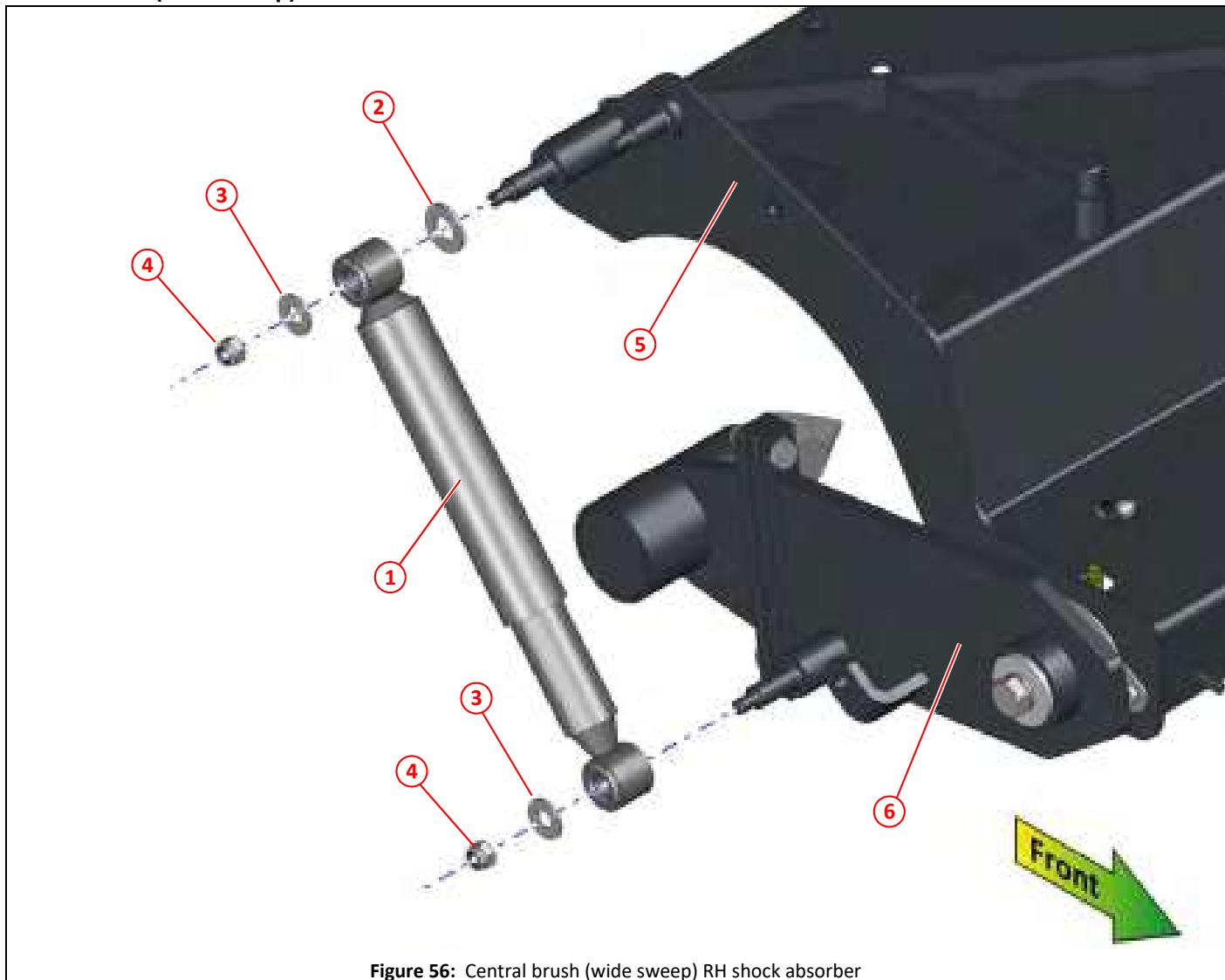


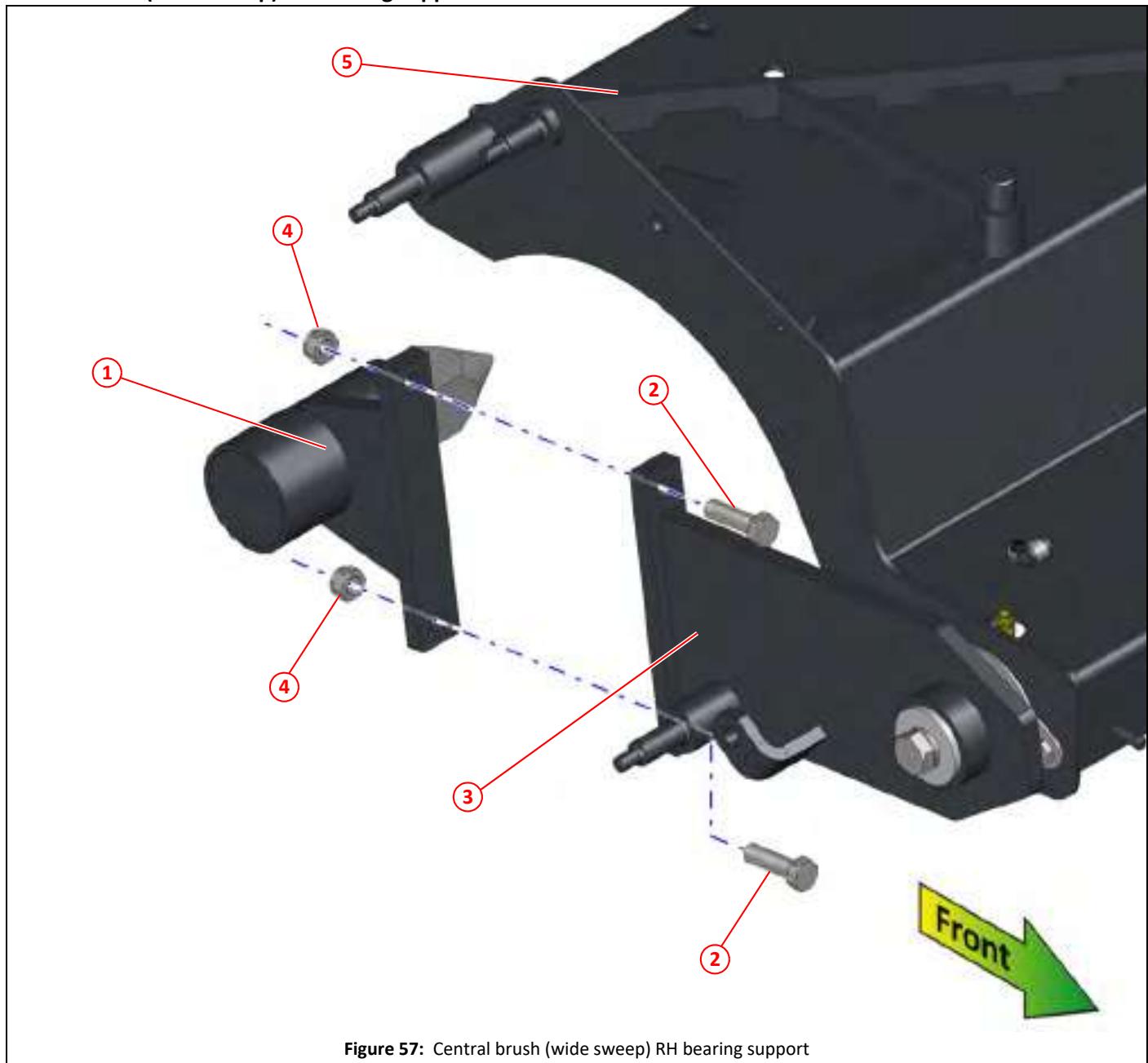
Figure 55: Central brush (wide sweep) RH raise lower ram

| Item | Part No | Qty | Description                                       |
|------|---------|-----|---|
| ①    | 020602  | 1   | Pneumatic cylinder $\varnothing 40 \times 125$    |
| ②    | 030532  | 1   | Air ram mounting bracket, central brush           |
| ③    | 011091  | 4   | Spring washer M6                                  |
| ④    | 011067  | 4   | Setscrew M6 x 20                                  |
| ⑤    | 011135  | 2   | Plain washer M61                                  |
| ⑥    | 011000  | 1   | Hose $\frac{5}{8}''$ , fuel SAE100R6, cut to 16mm |
| ⑦    | 011094  | 1   | Plain washer M10                                  |
| ⑧    | 011075  | 1   | Nyloc nut T M10                                   |
| ⑨    | 014469  | 1   | Clevis M12  |
| ⑩    | 023270  | 1   | Clevis pin $\varnothing 12$                       |
| ⑪    | 023269  | 1   | Safety fastener $\varnothing 12$                  |
| ⑫    | 024650  | 2   | 6mm green air pipe, length as required            |
| ⑬    | 036216  | 1   | Cover, central brush (wide sweep)                 |
| ⑭    | 023078  | 1   | Bearing plate RH                                  |

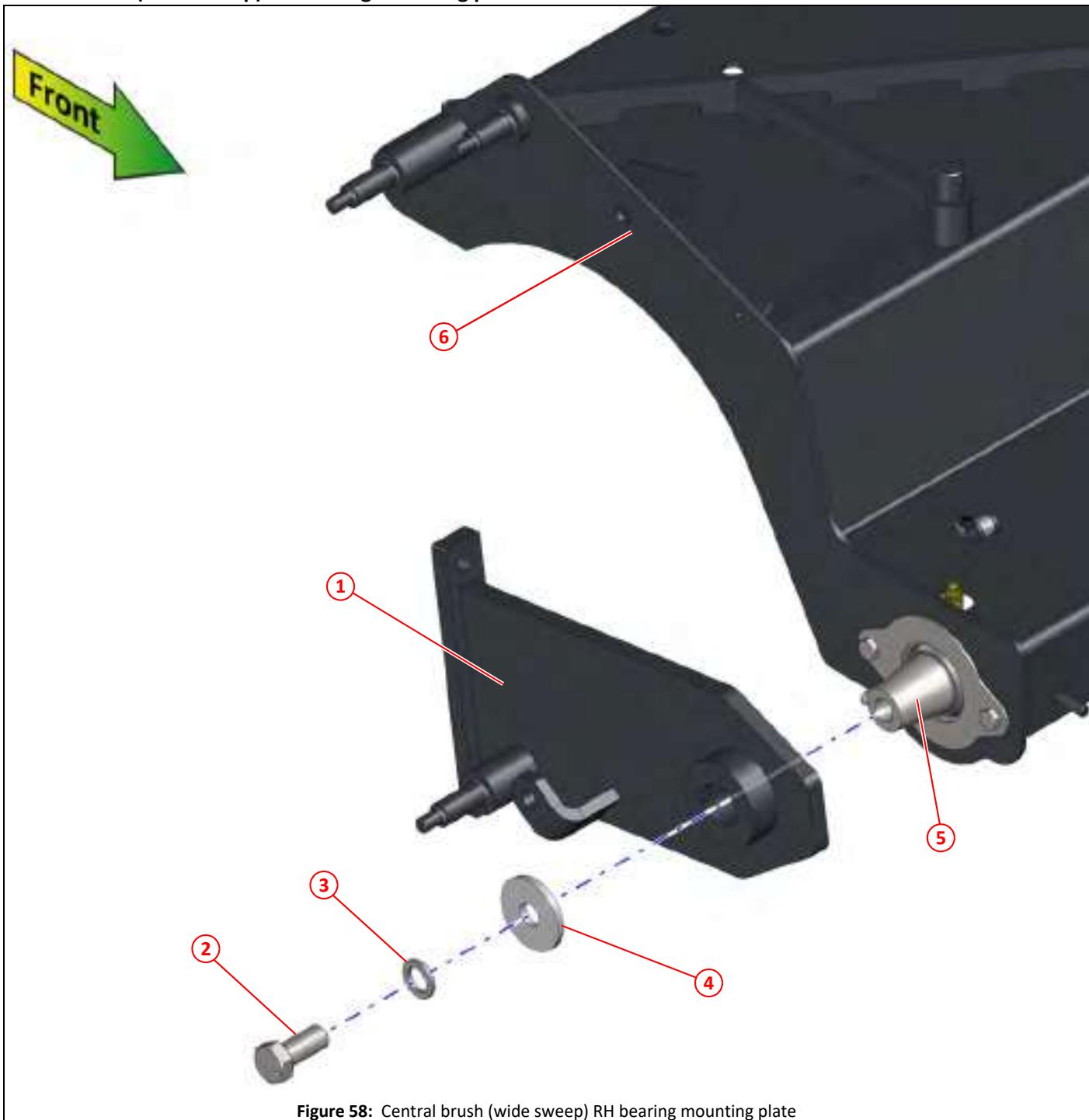
**Central brush (wide sweep) RH shock absorber**

**Figure 56:** Central brush (wide sweep) RH shock absorber

| Item | Part No | Qty | Description                       | File |
|------|---------|-----|-----------------------------------|------|
| ①    | 014063  | 1   | Shock absorber 320/500            |      |
| ②    | 011135  | 1   | Plain washer M16                  |      |
| ③    | 011096  | 2   | Plain washer M12                  |      |
| ④    | 011075  | 2   | Nyloc nut T M10                   |      |
| ⑤    | 036216  | 1   | Cover, central brush (wide sweep) |      |
| ⑥    | 023078  | 1   | Bearing plate LH                  |      |

## Central brush (wide sweep) RH bearing support

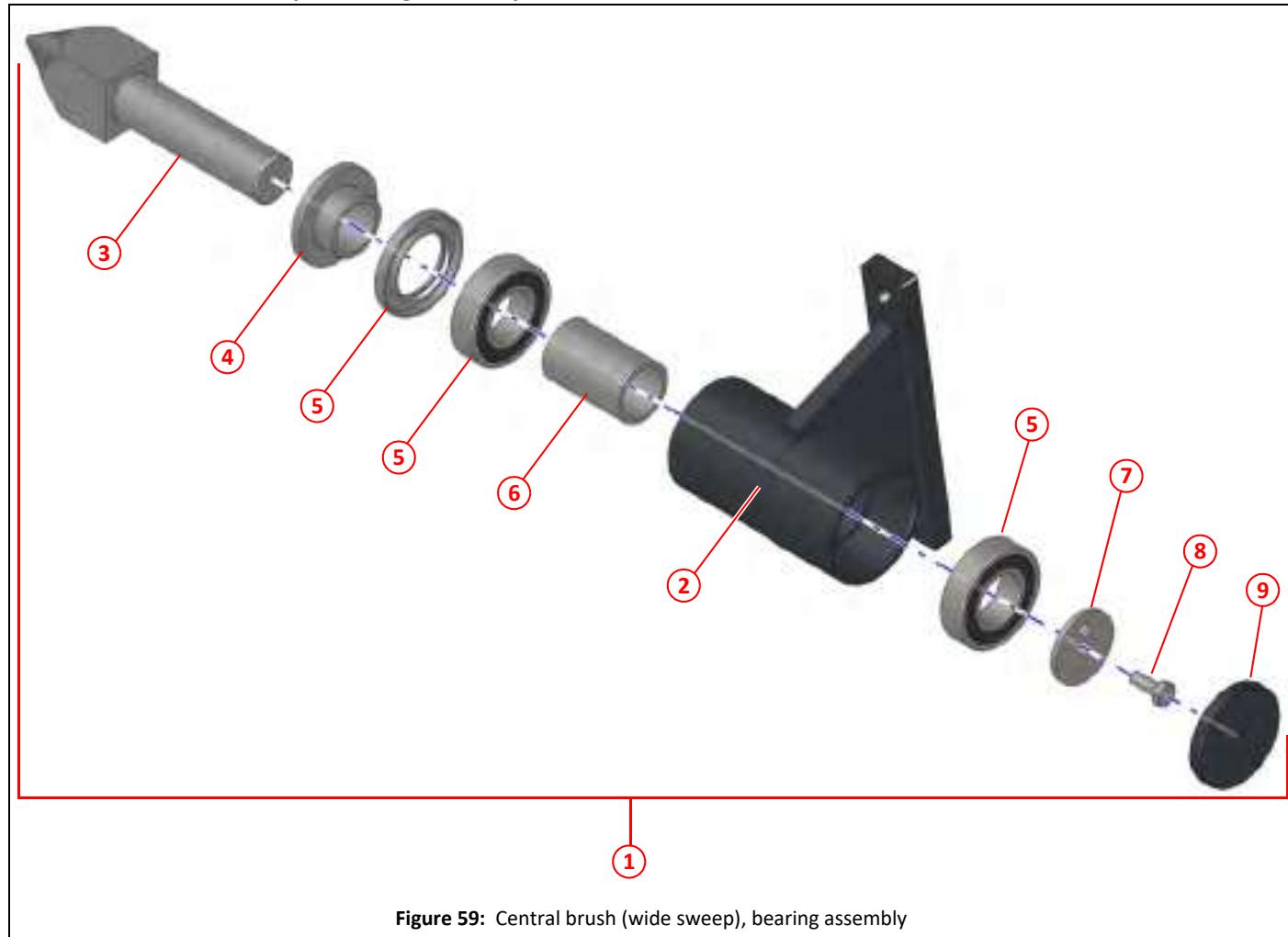


| Item | Part No | Qty | Description                                  |
|------|---------|-----|--|
| ①    | 024224  | 1   | Bearing assembly, central brush (wide sweep) |
| ②    | 011069  | 2   | Bolt M12 x 40                                |
| ③    | 023078  | 1   | Bearing plate LH                             |
| ④    | 011077  | 2   | Nyloc nut T M12                              |
| ⑤    | 036216  | 1   | Cover, central brush (wide sweep)            |

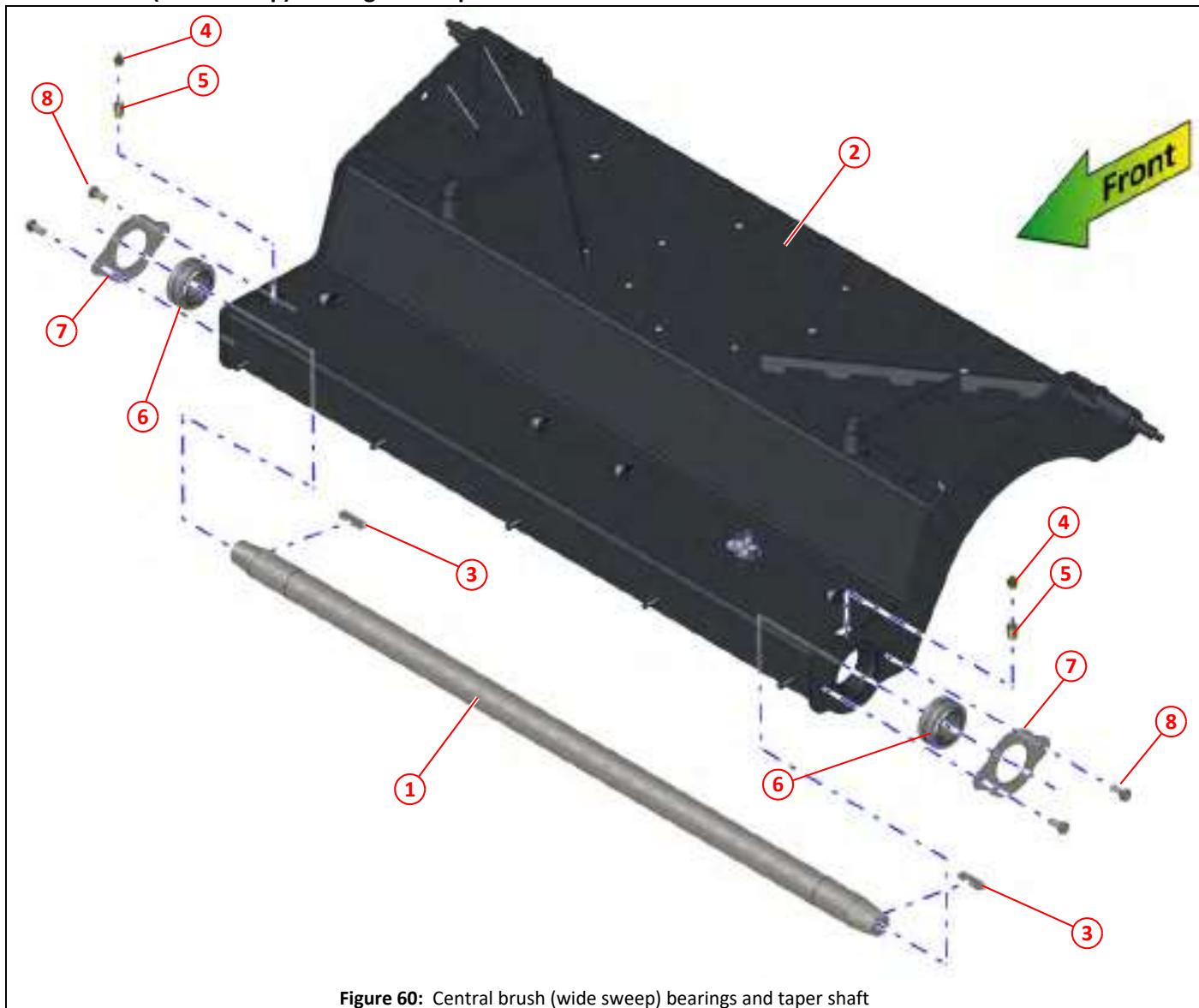
**Central brush (wide sweep) RH bearing mounting plate**


| Item | Part No | Qty | Description                       |  |
|------|---------|-----|-----------------------------------|--|
| ①    | 023078  | 1   | Bearing plate LH                  |  |
| ②    | 011141  | 1   | Bolt M16 x 35                     |  |
| ③    | 011142  | 1   | Spring washer M16                 |  |
| ④    | 013439  | 1   | Washer, ø50 x ø16.5 x 5           |  |
| ⑤    | 023080  | 1   | Shaft taper                       |  |
| ⑥    | 036216  | 1   | Cover, central brush (wide sweep) |  |

## Central brush (wide sweep), bearing assembly



| Item | Part No | Qty | Description                                  |
|------|---------|-----|--|
| ①    | 024224  | 1   | Bearing assembly, central brush (wide sweep) |
| ②    | 024219  | 1   | Bearing housing, central brush (wide sweep)  |
| ③    | 024223  | 1   | Shaft, central brush (wide sweep)            |
| ④    | 024221  | 1   | Spacer ø60 x ø30 x 20                        |
| ⑤    | 010578  | 2   | Bearing, ball, 6206 2Z                       |
| ⑥    | 024531  | 1   | Spacer ø38 x ø31 x 58                        |
| ⑦    | 010004  | 1   | Washer ø45 x ø9 x 4                          |
| ⑧    | 011010  | 1   | Setscrew M8 x 20                             |
| ⑨    | 024222  | 1   | Bearing cap, central brush (wide sweep)      |

**Central brush (wide sweep) bearings and taper shaft**

**Figure 60: Central brush (wide sweep) bearings and taper shaft**

| Item | Part No | Qty | Description                                   |
|------|---------|-----|---|
| ①    | 023080  | 1   | Taper shaft                                   |
| ②    | 036216  | 1   | Cover, central brush (wide sweep)             |
| ③    | 013292  | 2   | Key   |
| ④    | 010903  | 2   | Grease nipple, straight, $\frac{1}{8}$ " BSP  |
| ⑤    | 040301  | 2   | Grease nipple, extension, $\frac{1}{8}$ " BSP |
| ⑥    | 036789  | 2   | Spherical bearing                             |
| ⑦    | 037172  | 2   | Retainer, spherical bearing                   |
| ⑧    | 011010  | 4   | Setscrew M8 x 20                              |

## Central brush (wide sweep) spherical bearing LH

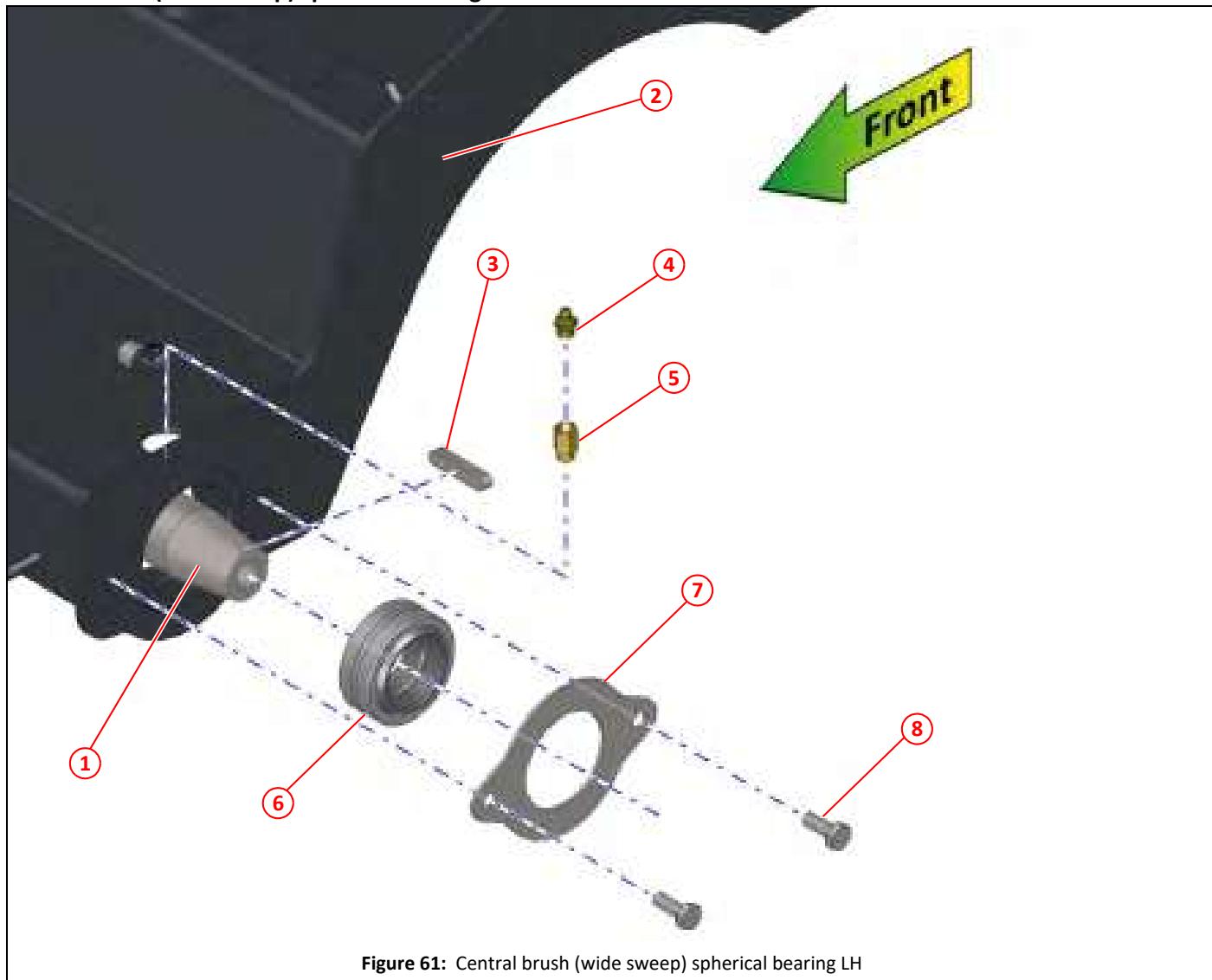
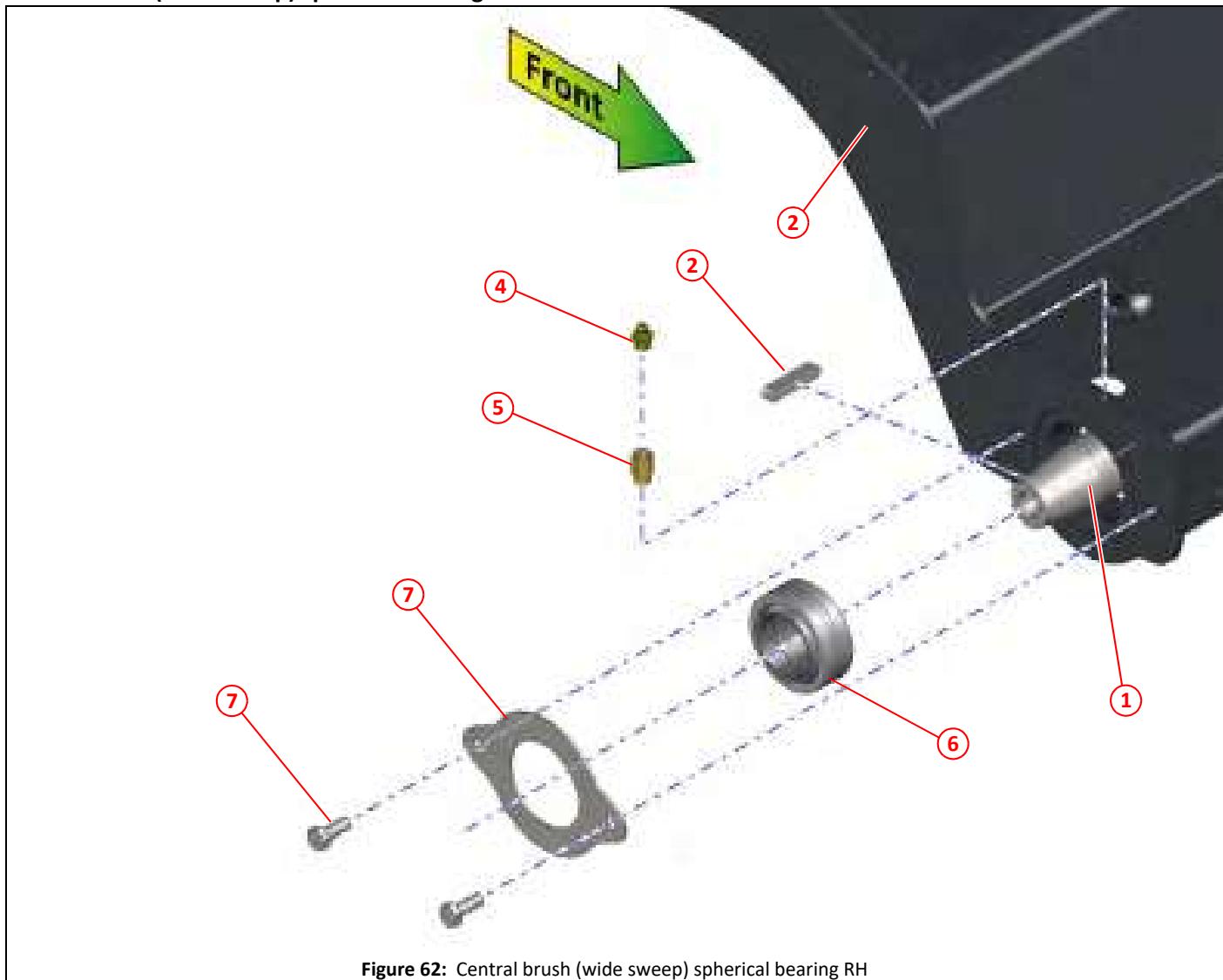


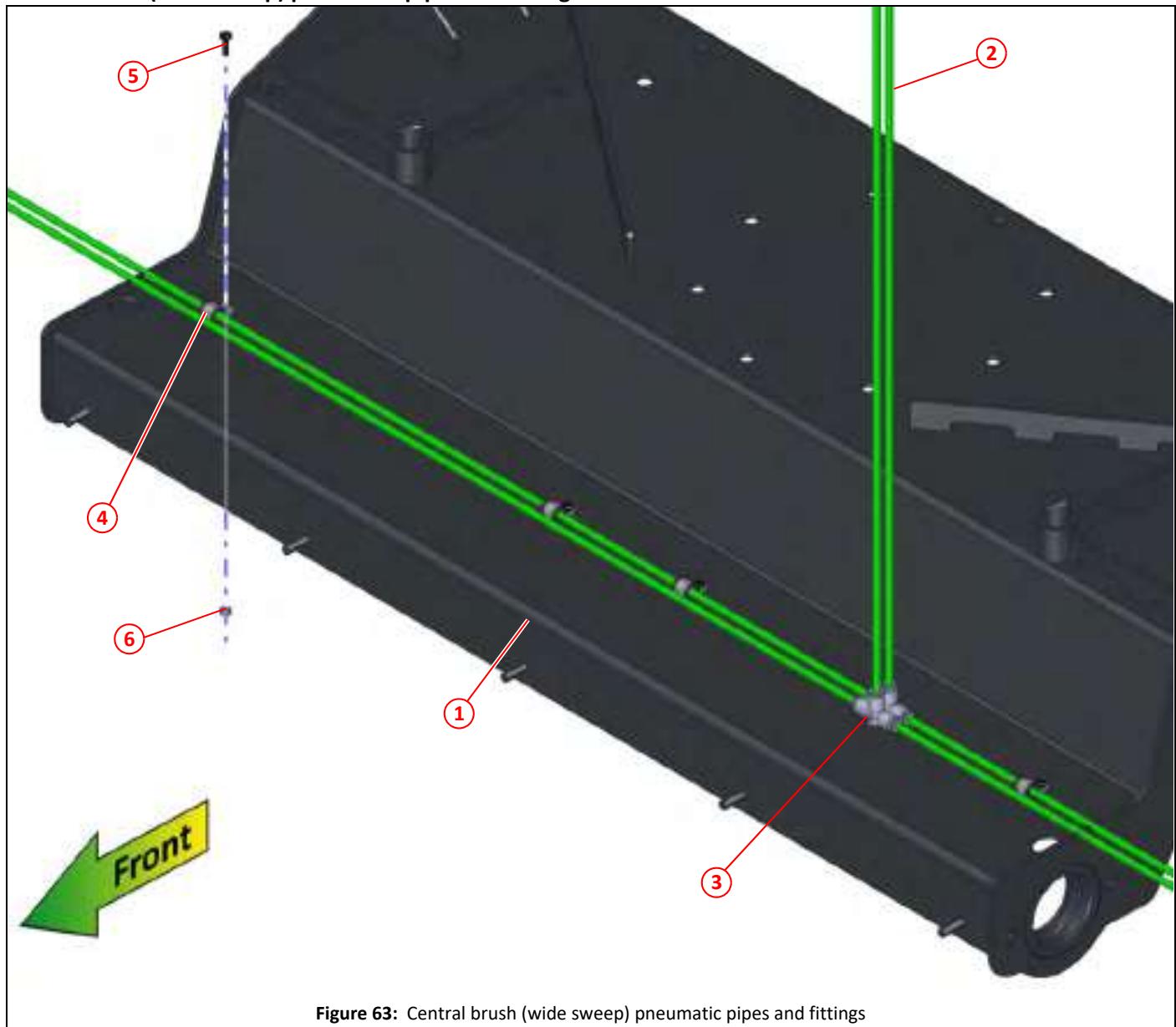
Figure 61: Central brush (wide sweep) spherical bearing LH

| Item | Part No | Qty | Description                                   |
|------|---------|-----|---|
| ①    | 023080  | 1   | Taper shaft                                   |
| ②    | 036216  | 1   | Cover, central brush (wide sweep)             |
| ③    | 013292  | 1   | Key   |
| ④    | 010903  | 1   | Grease nipple, straight, $\frac{1}{8}$ " BSP  |
| ⑤    | 040301  | 1   | Grease nipple, extension, $\frac{1}{8}$ " BSP |
| ⑥    | 036789  | 1   | Spherical bearing                             |
| ⑦    | 037172  | 1   | Retainer, spherical bearing                   |
| ⑧    | 011010  | 2   | Setscrew M8 x 20                              |

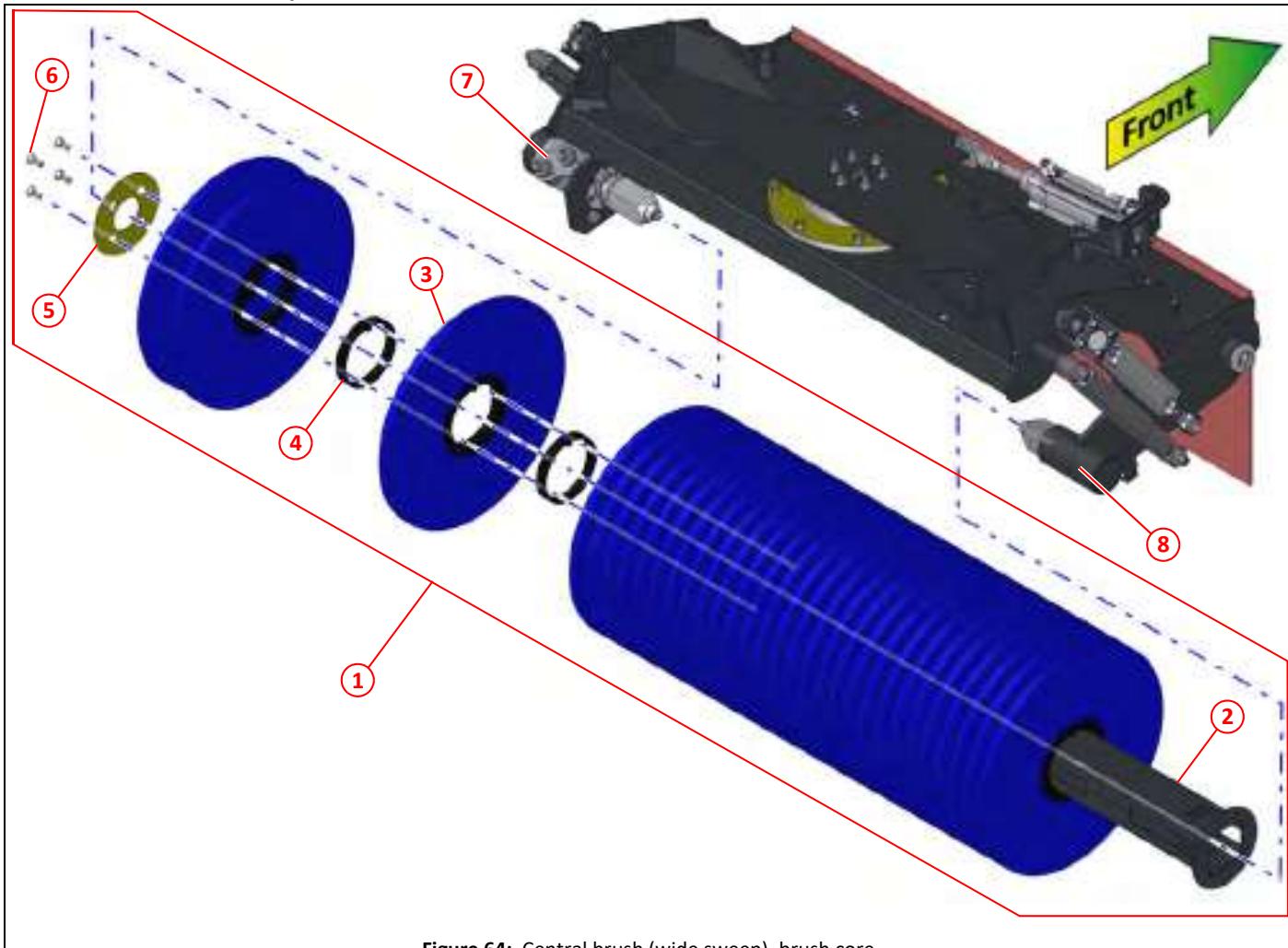
**Central brush (wide sweep) spherical bearing RH**

**Figure 62:** Central brush (wide sweep) spherical bearing RH

| Item | Part No | Qty | Description                                   | File |
|------|---------|-----|---|------|
| ①    | 023080  | 1   | Taper shaft                                   |      |
| ②    | 036216  | 1   | Cover, central brush (wide sweep)             |      |
| ③    | 013292  | 1   | Key   |      |
| ④    | 010903  | 1   | Grease nipple, straight, $\frac{1}{8}$ " BSP  |      |
| ⑤    | 040301  | 1   | Grease nipple, extension, $\frac{1}{8}$ " BSP |      |
| ⑥    | 036789  | 1   | Spherical bearing                             |      |
| ⑦    | 037172  | 1   | Retainer, spherical bearing                   |      |
| ⑧    | 011010  | 2   | Setscrew M8 x 20                              |      |

## Central brush (wide sweep) pneumatic pipes and fittings



| Item | Part No | Qty | Description                                |
|------|---------|-----|--|
| ①    | 036216  | 1   | Cover, central brush (wide sweep)          |
| ②    | 024650  | 4   | 6mm green air pipe, length as required     |
| ③    | 024647  | 2   | 6mm tee grey                               |
| ④    | 021914  | 4   | P-clip ø12, rubber sealed                  |
| ⑤    | 000234  | 4   | Set screw, pan head pozidriv M5 x 16 black |
| ⑥    | 000155  | 4   | Nyloc nut M5                               |

**Central brush (wide sweep), brush core**

**Figure 64: Central brush (wide sweep), brush core**

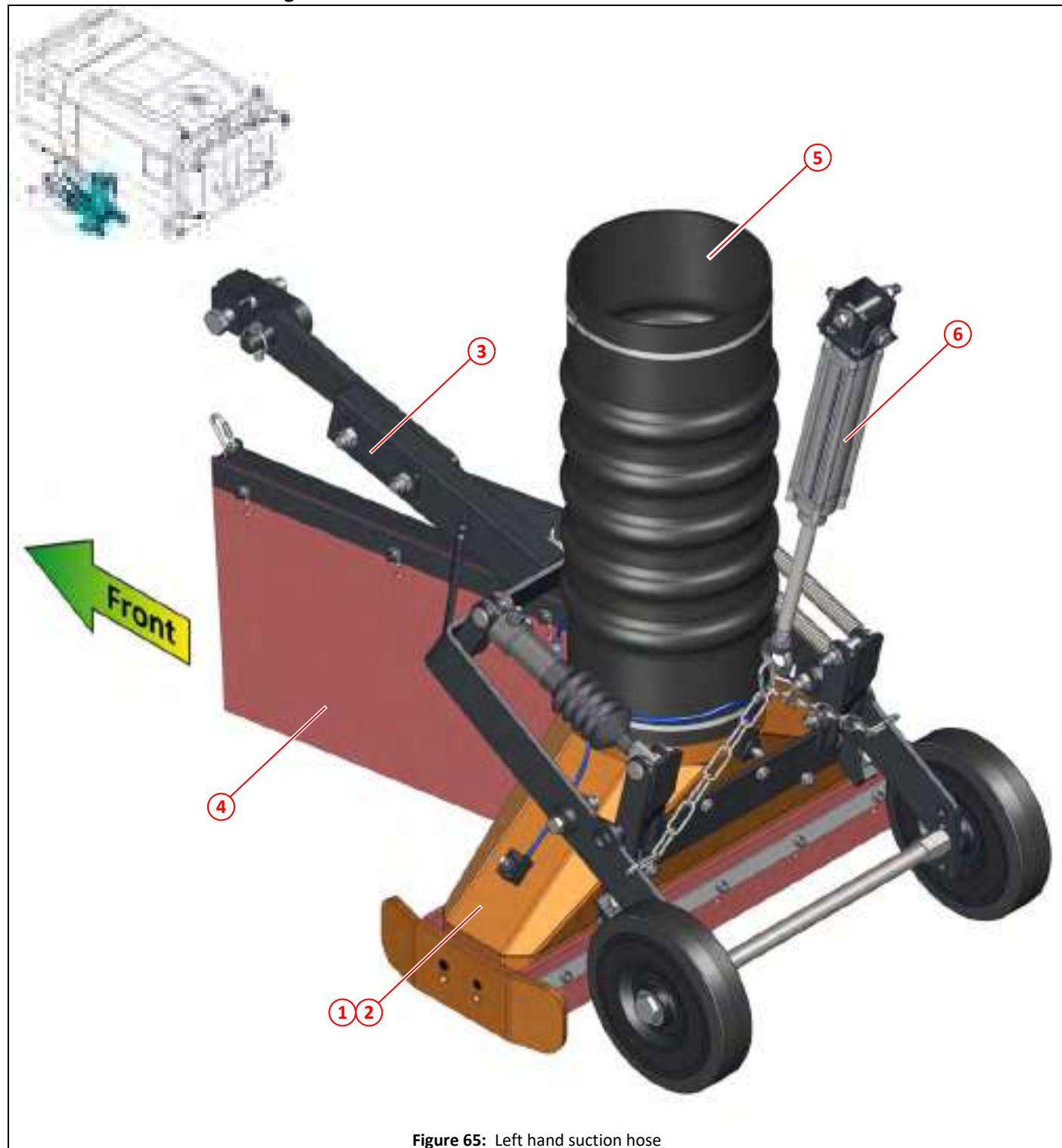
| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 037588  | 1   | Brush assembly, central brush (wide sweep)            |
| ②    | 013646  | 1   | Brush core  |
| ③    | 023474  | 31  | Brush fill ø400 poly                                  |
| ④    | 023472  | 29  | Brush spacer  |
| ⑤    | 013649  | 1   | End plate, brush core                                 |
| ⑥    | 011417  | 4   | Socket cap screw, chamfered, $\frac{3}{8}$ " UNC X 1" |
| ⑦    | 010566  | 1   | Motor 3596 (OMP 100)                                  |
| ⑧    | 024224  | 1   | Bearing assembly, central brush (wide sweep)          |



# Suction

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**Left hand suction nozzle arrangement**


| Item | Part No | Qty | Description                               |                      |
|------|---------|-----|---|----------------------|
| ①    | 047107  | 1   | Suction nozzle                            | 86,94                |
| ②    | 047988  | 1   | Suction nozzle, PU lined                  | 86,94                |
| ③    | 047128  | 1   | Nozzle frame, left hand                   | 86,89,90,91,92,93,95 |
| ④    | 010247  | 1   | Skirt                                     | 86                   |
| ⑤    | 013028  | 1   | Suction hose                              | 86                   |
| ⑥    | 030772  | 1   | Pneumatic cylinder ø50 x 200, nozzle lift | 86                   |

## Left hand suction hose

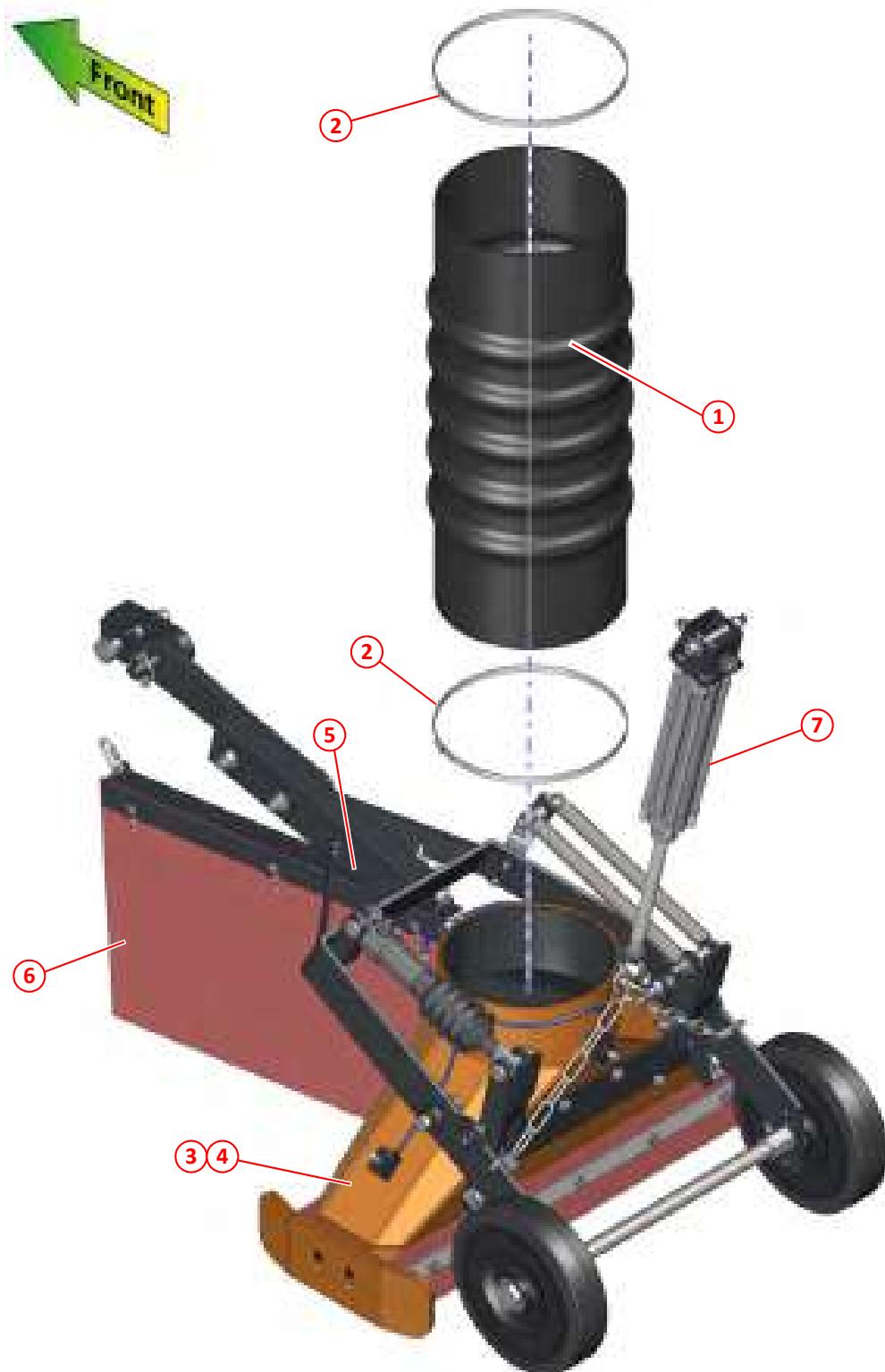
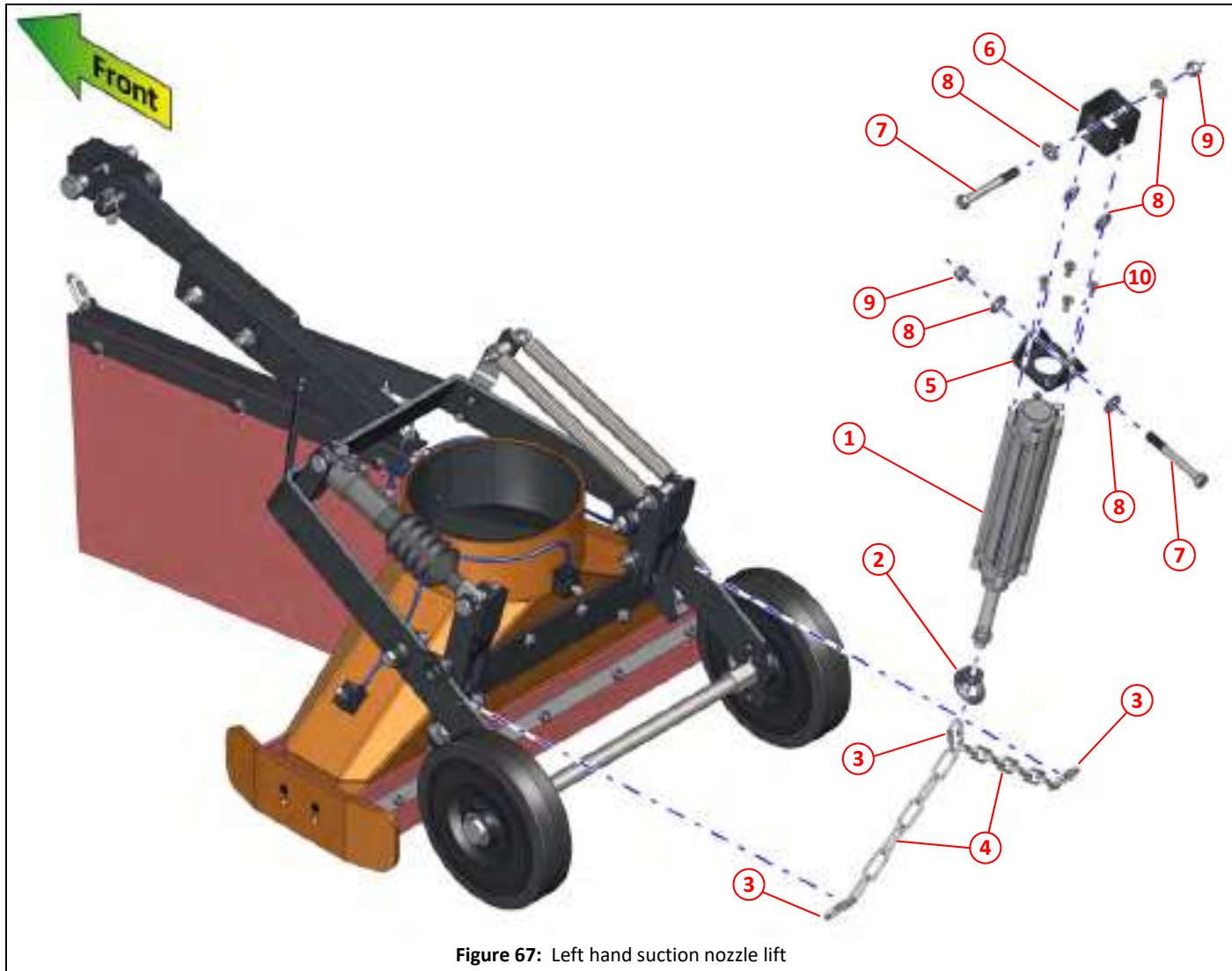


Figure 66: Left hand suction hose

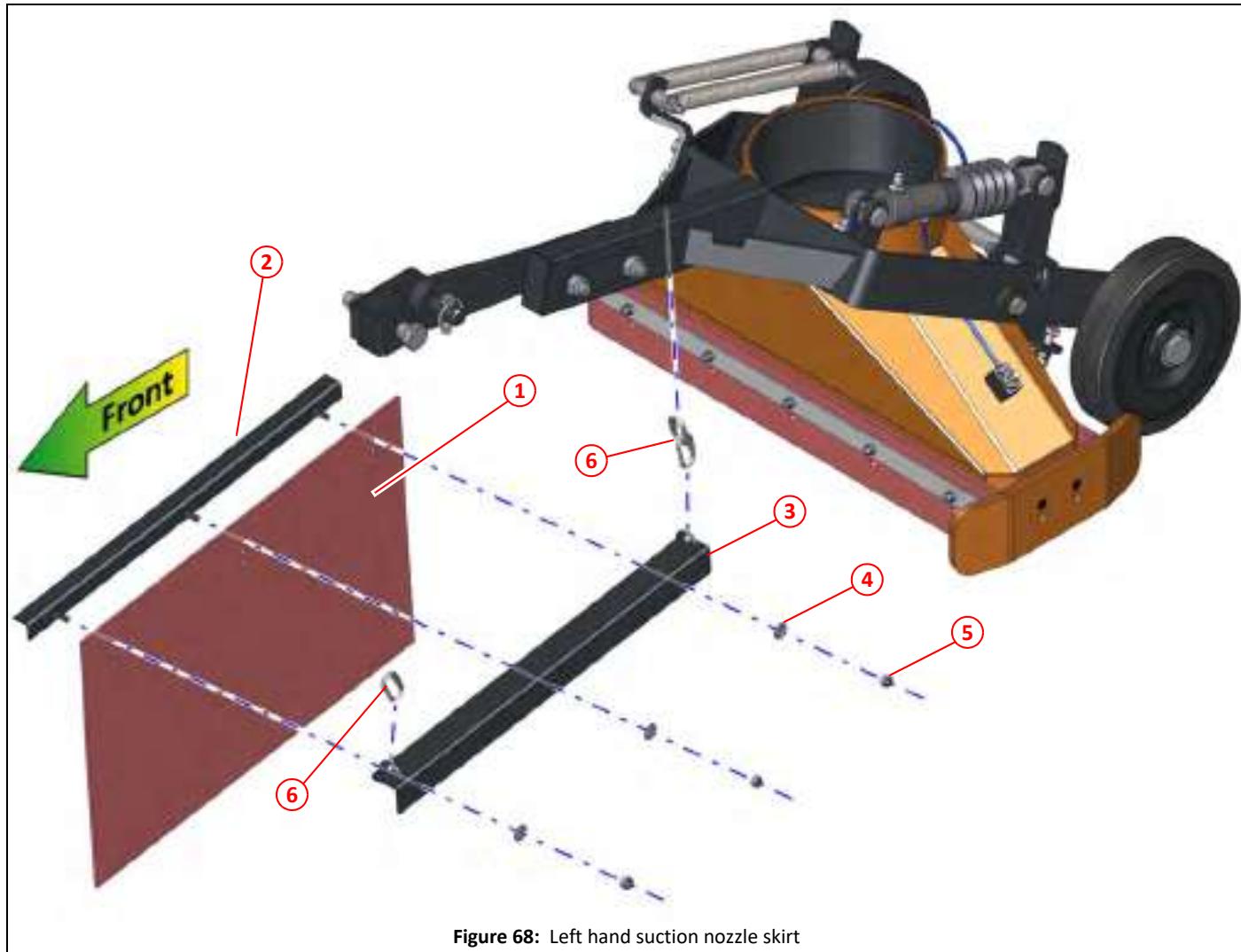
| Item | Part No | Qty | Description   |  |
|------|---------|-----|---|--|
| ①    | 013028  | 1   | Suction hose  |  |
| ②    | 012933  | 1   | Jubilee clip No 10.50 ( $\varnothing 235 - \varnothing 267$ ) |  |
| ③    | 047107  | 1   | Suction nozzle  |  |
| ④    | 047988  | 1   | Suction nozzle, PU lined                                      |  |
| ⑤    | 047128  | 1   | Nozzle frame, left hand                                       |  |
| ⑥    | 010247  | 1   | Skirt   |  |
| ⑦    | 030772  | 1   | Pneumatic cylinder $\varnothing 50 \times 200$ , nozzle lift  |  |

## Left hand suction nozzle lift



| Item | Part No | Qty | Description                                 |
|------|---------|-----|---|
| ①    | 030772  | 1   | Pneumatic cylinder ø50 x 200, nozzle lift   |
| ②    | 032293  | 1   | Ring nut M16 x 1.5                          |
| ③    | 010606  | 3   | Caribiner                                   |
| ④    | 010525  | 1   | Chain, large link, nozzle lift              |
| ⑤    | 030777  | 1   | Pivot, cylinder mount, nozzle lift          |
| ⑥    | 030776  | 1   | Pivot block, nozzle lift                    |
| ⑦    | 011057  | 2   | Bolt M12 x 100                              |
| ⑧    | 011096  | 6   | Washer M12                                  |
| ⑨    | 011077  | 1   | Nyloc nut M12                               |
| ⑩    | 000003  | 4   | Screw, socket, countersunk, M8 x 20, plated |

## Left hand suction nozzle skirt



| Item | Part No | Qty | Description                |  |
|------|---------|-----|----------------------------|--|
| ①    | 010247  | 1   | Skirt, 3-pitch, heavy duty |  |
| ②    | 010275  | 1   | Skirt clamp                |  |
| ③    | 013145  | 1   | Skirt angle                |  |
| ④    | 011092  | 3   | Washer M8                  |  |
| ⑤    | 011073  | 3   | Nyloc nut T M8             |  |
| ⑥    | 010606  | 3   | Carabiner                  |  |

## Left hand suction nozzle frame

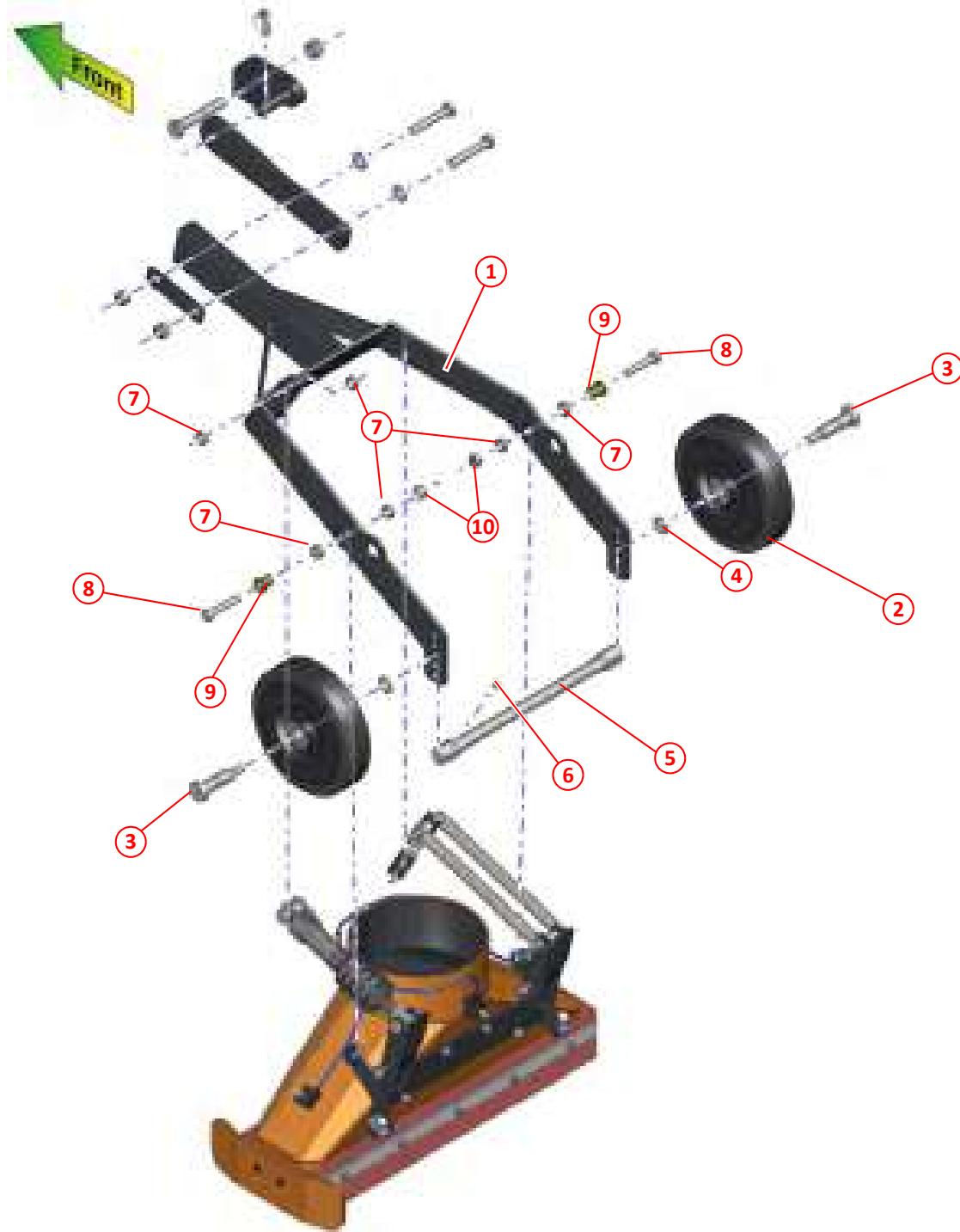


Figure 69: Left hand suction nozzle frame

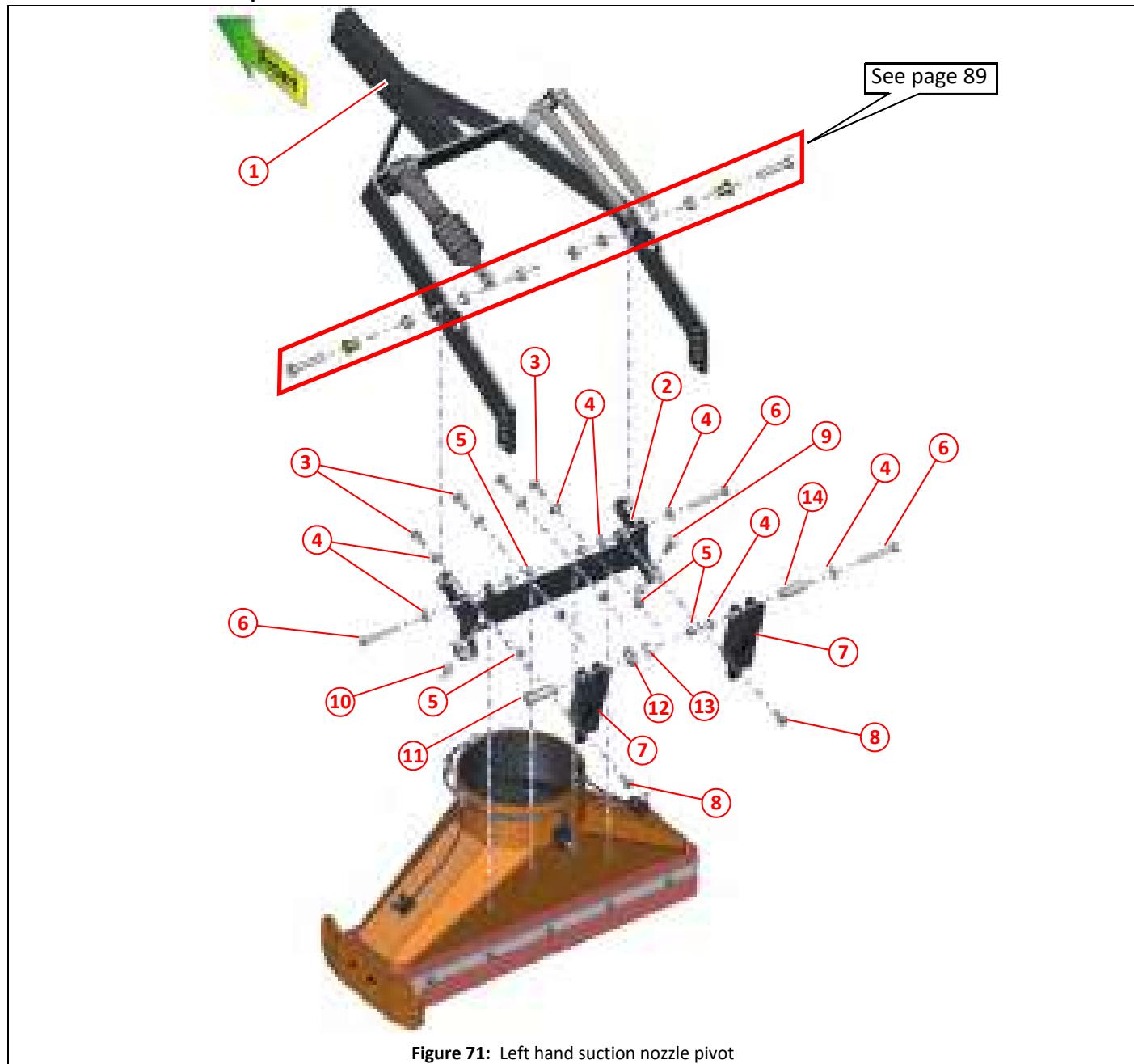
| Item | Part No | Qty | Description                                  |  |
|------|---------|-----|--|--|
| ①    | 047128  | 1   | Nozzle frame, left hand                      |  |
| ②    | 020331  | 2   | Wheel, nozzle, Ø250                          |  |
| ③    | 020332  | 2   | Axle bolt, nozzle                            |  |
| ④    | 011135  | 2   | Washer M16                                   |  |
| ⑤    | 020333  | 1   | Axle   |  |
| ⑥    | 010903  | 1   | Grease nipple, straight, $\frac{1}{8}$ " BSP |  |
| ⑦    | 024682  | 6   | Bush Ø25 x Ø20 x 10                          |  |
| ⑧    | 000351  | 2   | Setscrew M14 x 70                            |  |
| ⑨    | 021416  | 2   | Sleeve, suction nozzle                       |  |
| ⑩    | 011127  | 2   | Nyloc nut T M14                              |  |

## Left hand suction nozzle tow hitch



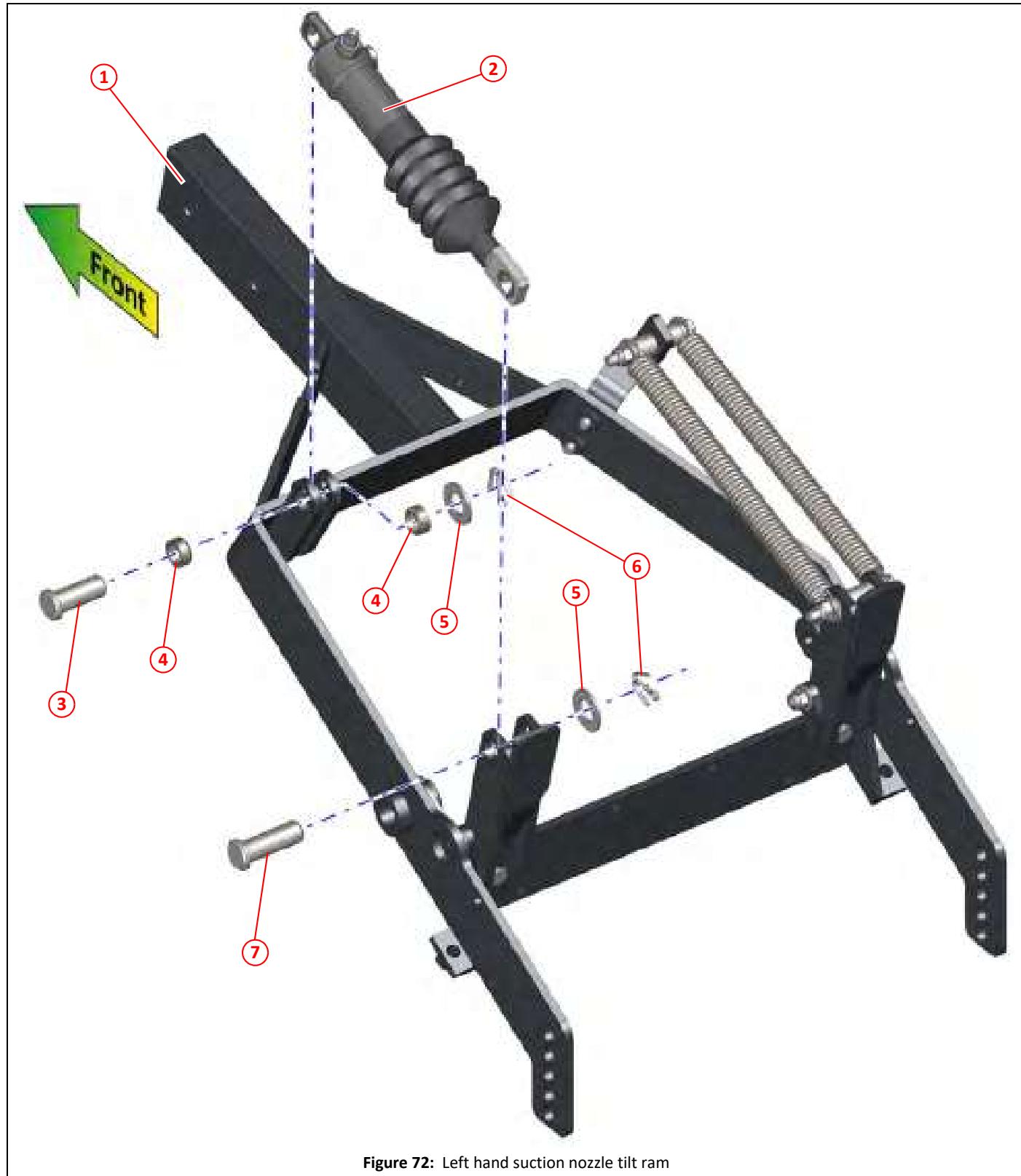
Figure 70: Left hand suction nozzle tow hitch

| Item | Part No | Qty | Description             |
|------|---------|-----|-------------------------|
| ①    | 047128  | 1   | Nozzle frame, left hand |
| ②    | 047130  | 1   | Tow hitch, nozzle       |
| ③    | 000043  | 2   | Bolt M16 x 90           |
| ④    | 011135  | 2   | Washer M16              |
| ⑤    | 045492  | 1   | Backing plate           |
| ⑥    | 011060  | 2   | Nyloc nut T M16         |
| ⑦    | 045465  | 1   | Tow pin, nozzle         |
| ⑧    | 011422  | 1   | Bolt M20 x 110          |
| ⑨    | 011082  | 1   | Nyloc nut T M20         |
| ⑩    | 013053  | 1   | Lynch pin               |

**Left hand suction nozzle pivot**


| Item | Part No | Qty | Description                                    |
|------|---------|-----|--|
| ①    | 047128  | 1   | Nozzle frame, left hand                        |
| ②    | 047114  | 1   | Nozzle pivot                                   |
| ③    | 011032  | 4   | Setscrew M10 x 30                              |
| ④    | 011094  | 10  | Washer M10                                     |
| ⑤    | 011075  | 5   | Nyloc nut T M10                                |
| ⑥    | 011038  | 3   | Bolt M10 x 80                                  |
| ⑦    | 047116  | 2   | Mounting bracket, spring/ram                   |
| ⑧    | 011031  | 2   | Setscrew M10 x 25                              |
| ⑨    | 011054  | 2   | Setscrew M12 x 45                              |
| ⑩    | 011076  | 2   | Full nut M12                                   |
| ⑪    | 046749  | 1   | Clevis pin ø20 x 60                            |
| ⑫    | 011102  | 1   | Washer M20                                     |
| ⑬    | 011122  | 1   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ " |
| ⑭    | 047136  | 1   | Spring boss ø10.5 x 55, double stepped         |

## Left hand suction nozzle tilt ram



| Item | Part No | Qty | Description                                    |  |
|------|---------|-----|--|--|
| ①    | 047128  | 1   | Nozzle frame, left hand                        |  |
| ②    | 041955  | 1   | Hydraulic ram assembly, nozzle tilt            |  |
| ③    | 046750  | 1   | Clevis pin ø20 x 50                            |  |
| ④    | 024682  | 2   | Bush ø25 x ø20 x 10                            |  |
| ⑤    | 011102  | 2   | Washer M20                                     |  |
| ⑥    | 011122  | 2   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ " |  |
| ⑦    | 046749  | 1   | Clevis pin ø20 x 60                            |  |

**Left hand suction nozzle tilt return springs**

**Figure 73:** Left hand suction nozzle tilt return springs

| Item | Part No | Qty | Description                               |  |
|------|---------|-----|---|--|
| ①    | 047128  | 1   | Nozzle frame, left hand                   |  |
| ②    | 047126  | 1   | Spring bracket, suction nozzle, left hand |  |
| ③    | 011032  | 2   | Setscrew M10 x 30                         |  |
| ④    | 010017  | 2   | Spring                                    |  |
| ⑤    | 011038  | 2   | Bolt M10 x 80                             |  |
| ⑥    | 011094  | 4   | Washer M10                                |  |
| ⑦    | 047135  | 2   | Spring boss, ø10.5 x 23.5, stepped        |  |
| ⑧    | 047136  | 1   | Spring boss ø10.5 x 55, double stepped    |  |
| ⑨    | 011075  | 2   | Nyloc nut T M10                           |  |

## Left hand suction nozzle, flaps and skid plate

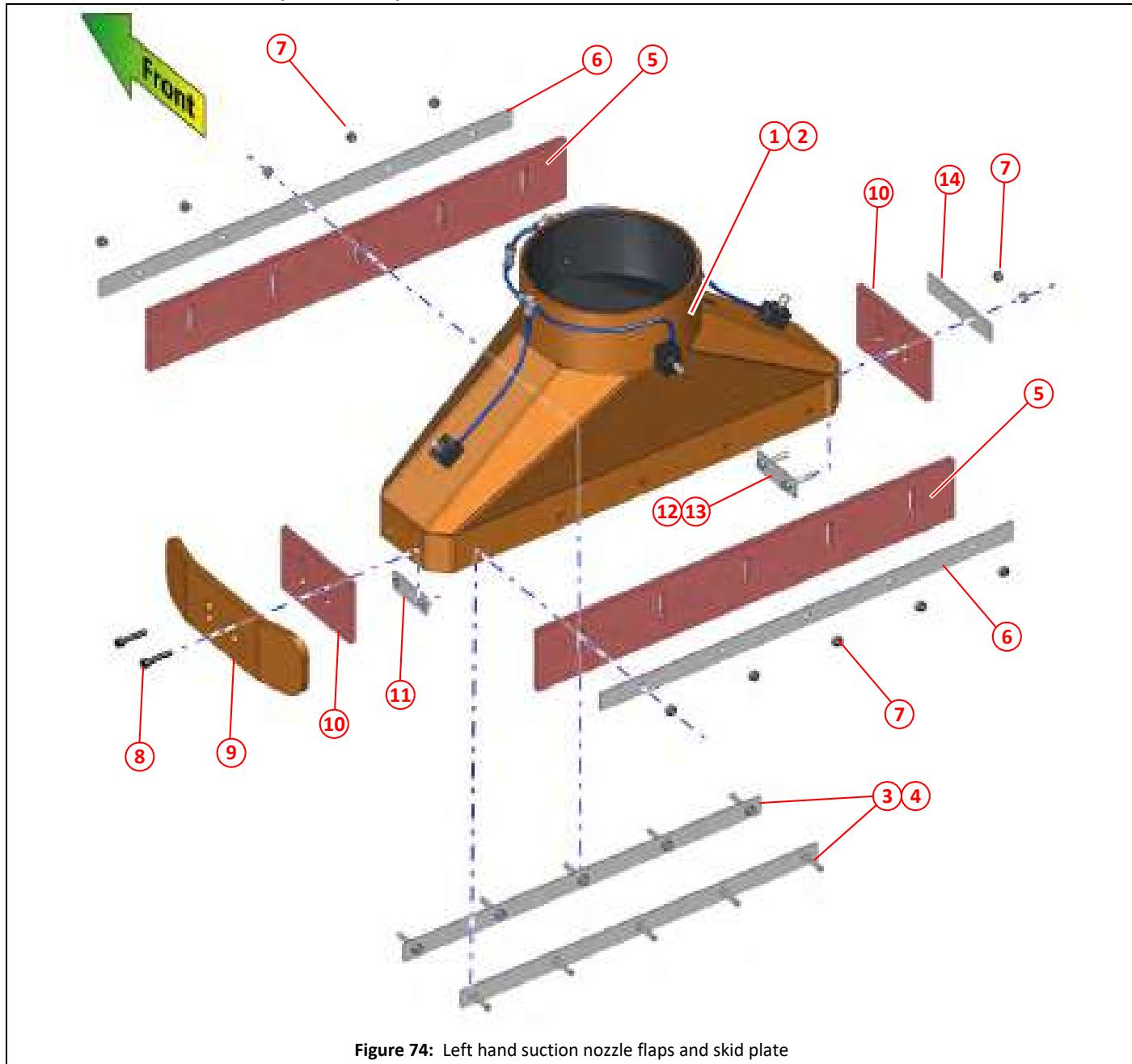
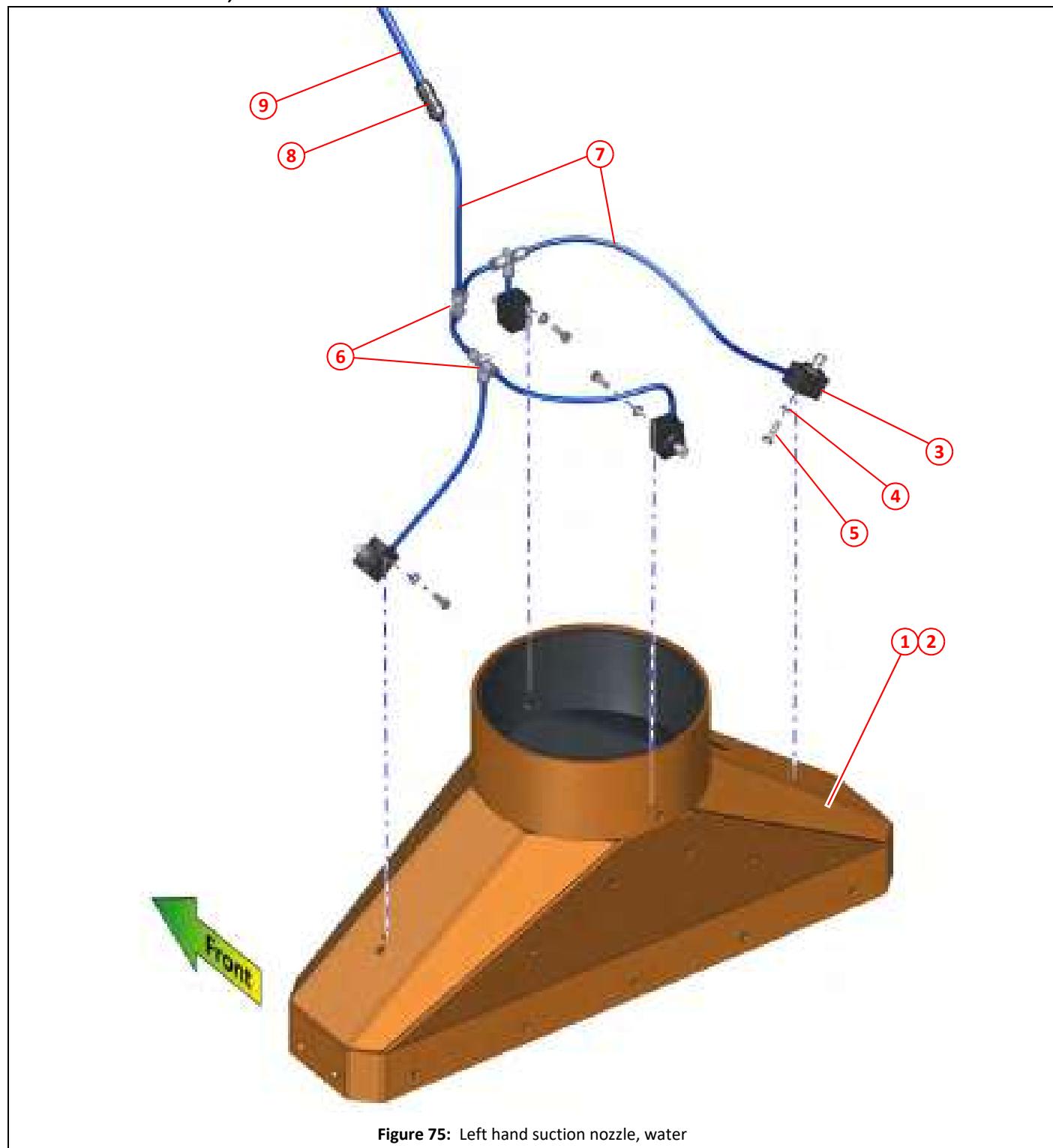


Figure 74: Left hand suction nozzle flaps and skid plate

| Item | Part No | Qty | Description                                    |
|------|---------|-----|--|
| ①    | 047107  | 1   | Suction nozzle                                 |
| ②    | 047988  | 1   | Suction nozzle, PU lined                       |
| ③    | 047110  | 2   | Flap clamp, long                               |
| ④    | 048513  | 2   | Flap clamp, long, for PU lined suction nozzle  |
| ⑤    | 047108  | 2   | Flap, long, suction nozzle                     |
| ⑥    | 047112  | 2   | Flap clamp strip, long                         |
| ⑦    | 011073  | 12  | Nyloc nut T M8                                 |
| ⑧    | 000096  | 2   | Socket cap screw M8 x 40                       |
| ⑨    | 047115  | 1   | Skid plate                                     |
| ⑩    | 047109  | 2   | Flap, short                                    |
| ⑪    | 047323  | 1   | Skid plate clamp strip                         |
| ⑫    | 047113  | 1   | Flap clamp, short                              |
| ⑬    | 048512  | 1   | Flap clamp, short, for PU lined suction nozzle |
| ⑭    | 047111  | 1   | Flap clamp strip, short                        |

**Left hand suction nozzle, water**

**Figure 75: Left hand suction nozzle, water**

| Item | Part No | Qty | Description   |  |
|------|---------|-----|---|--|
| ①    | 047107  | 1   | Suction nozzle  |  |
| ②    | 047988  | 1   | Suction nozzle, PU lined                                |  |
| ③    | 034342  | 4   | Water nozzle, low pressure                              |  |
| ④    | 011091  | 4   | Spring washer M6  |  |
| ⑤    | 011067  | 4   | Setscrew M6 x 20  |  |
| ⑥    | 024647  | 3   | 6mm Tee, grey   |  |
| ⑦    | 035733  | 6   | Blue flexible nylon tubing, ø6mm, (length as required)  |  |
| ⑧    | 041029  | 1   | Push in adapter, straight, ø10mm to ø6mm                |  |
| ⑨    | 041031  | 1   | Blue flexible nylon tubing, ø10mm, (length as required) |  |

## Right hand suction nozzle arrangement

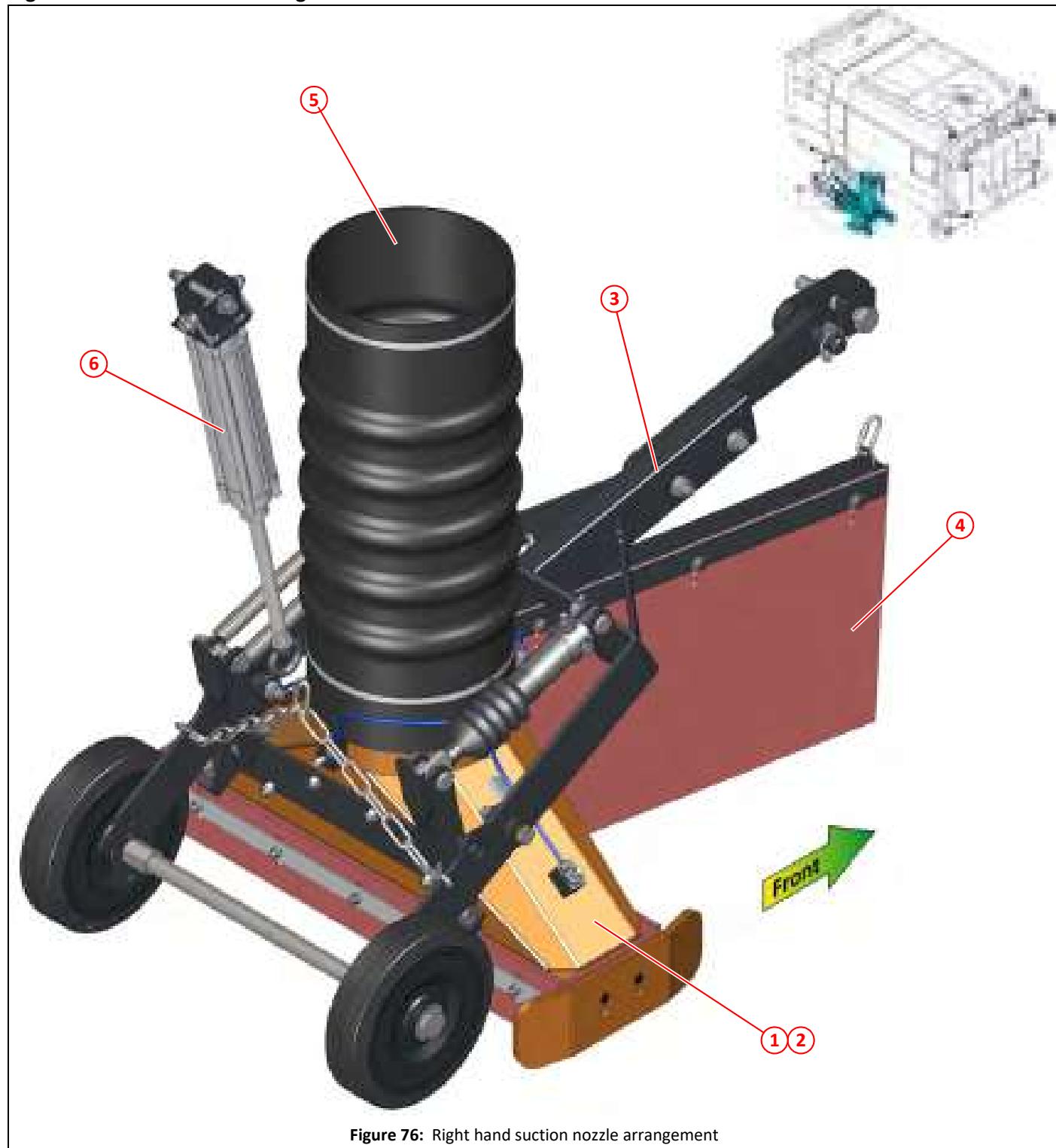


Figure 76: Right hand suction nozzle arrangement

| Item | Part No | Qty | Description                               |
|------|---------|-----|---|
| ①    | 047107  | 1   | Suction nozzle                            |
| ②    | 047988  | 1   | Suction nozzle, PU lined                  |
| ③    | 047129  | 1   | Nozzle frame, right hand                  |
| ④    | 010247  | 1   | Skirt                                     |
| ⑤    | 013028  | 1   | Suction hose                              |
| ⑥    | 030772  | 1   | Pneumatic cylinder ø50 x 200, nozzle lift |

## Right hand suction hose

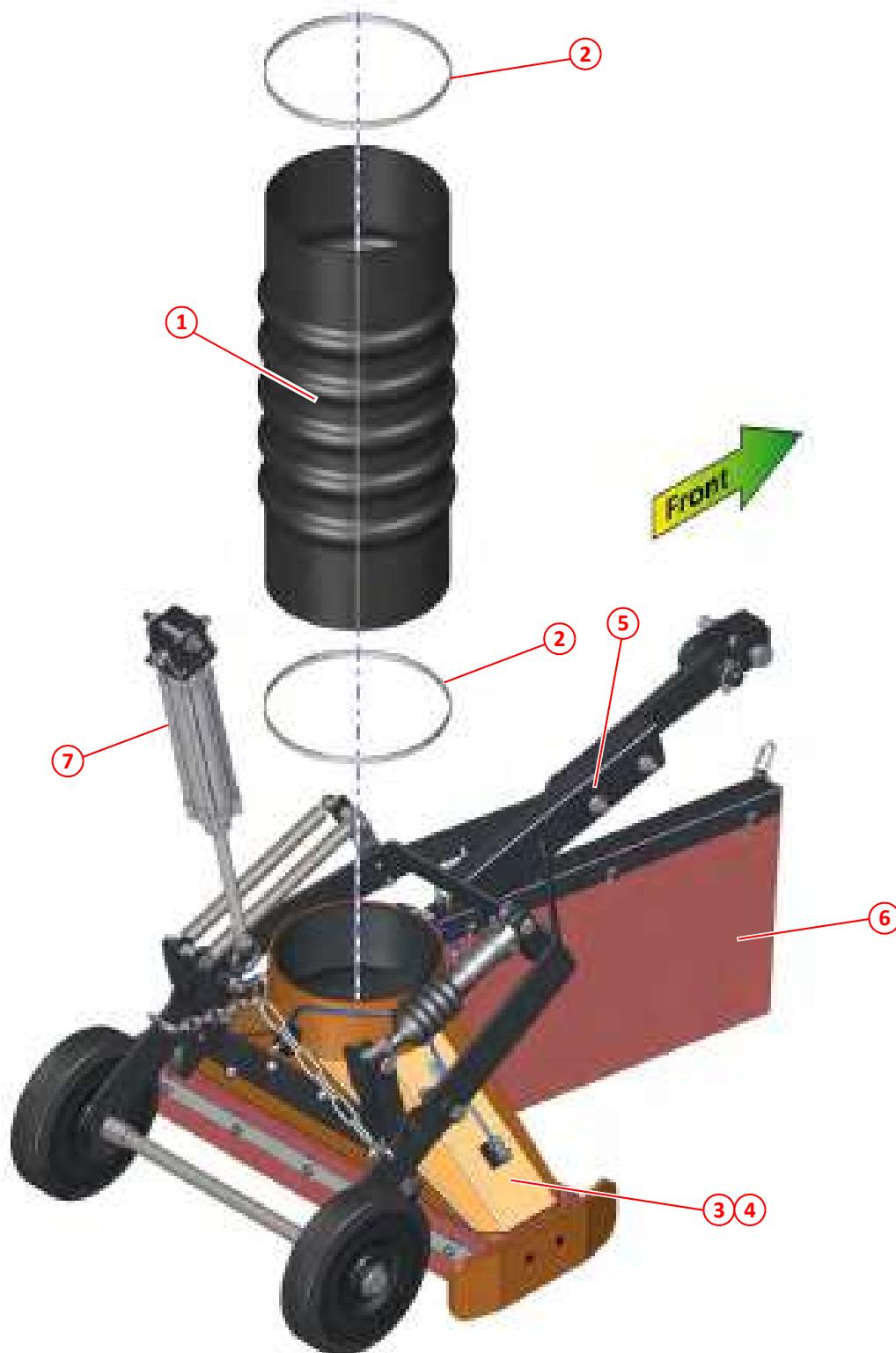


Figure 77: Right hand suction hose

| Item | Part No | Qty | Description                               |
|------|---------|-----|---|
| ①    | 013028  | 1   | Suction hose                              |
| ②    | 012933  | 1   | Jubilee clip No 10.50 (235 - 267)         |
| ③    | 047107  | 1   | Suction nozzle                            |
| ④    | 047988  | 1   | Suction nozzle, PU lined                  |
| ⑤    | 047128  | 1   | Nozzle frame, left hand                   |
| ⑥    | 010247  | 1   | Skirt                                     |
| ⑦    | 030772  | 1   | Pneumatic cylinder ø50 x 200, nozzle lift |

## Suction

### Right hand suction nozzle lift

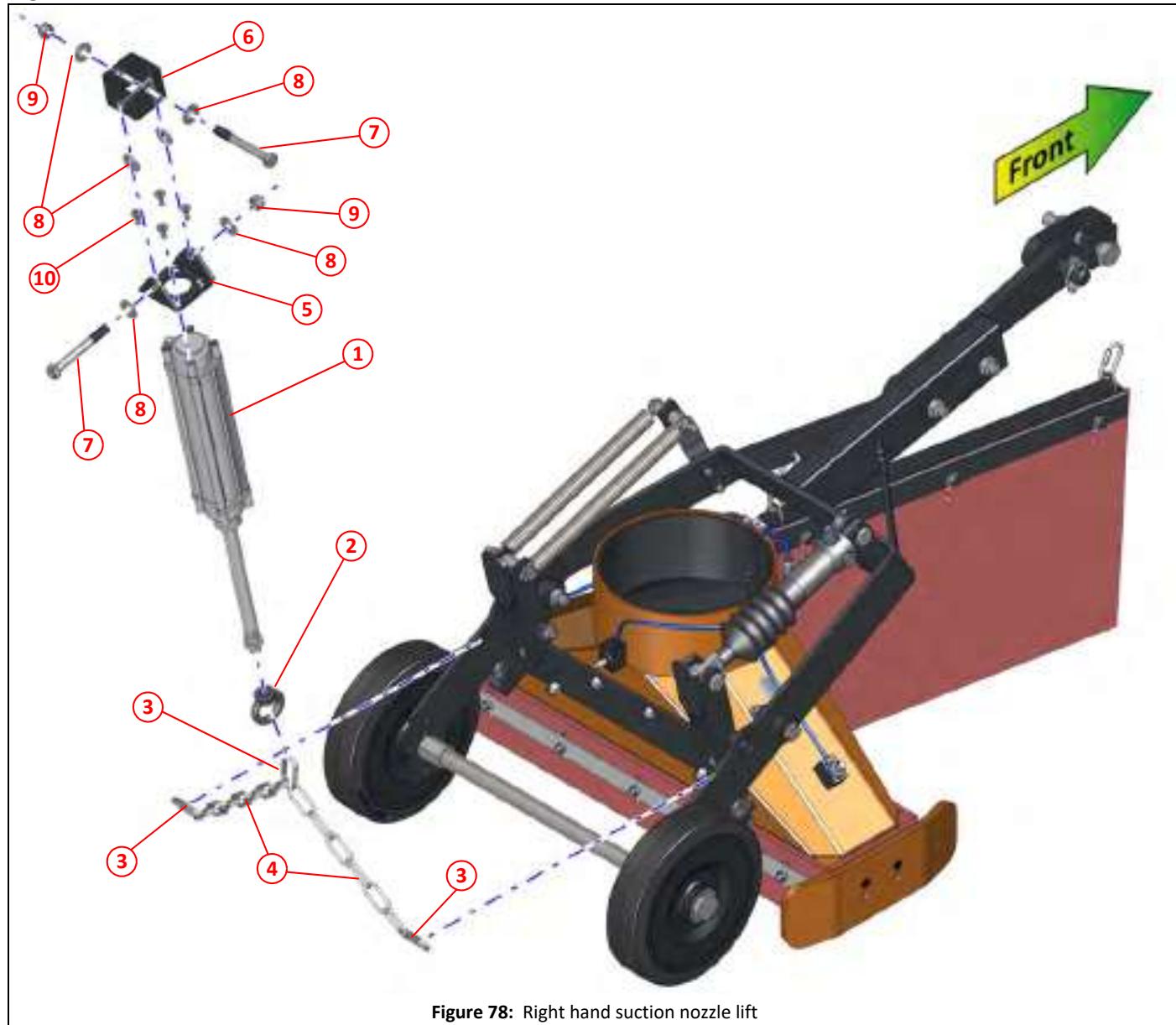


Figure 78: Right hand suction nozzle lift

| Item | Part No | Qty | Description                                 |
|------|---------|-----|---|
| ①    | 030772  | 1   | Pneumatic cylinder ø50 x 200, nozzle lift   |
| ②    | 032293  | 1   | Ring nut M16 x 1.5                          |
| ③    | 010606  | 3   | Carabiner                                   |
| ④    | 010525  | 2   | Chain, large link, nozzle lift              |
| ⑤    | 030777  | 1   | Pivot, cylinder mount, nozzle lift          |
| ⑥    | 030776  | 1   | Pivot block, nozzle lift                    |
| ⑦    | 011057  | 2   | Bolt M12 x 100                              |
| ⑧    | 011096  | 6   | Washer M12                                  |
| ⑨    | 011077  | 1   | Nyloc nut M12                               |
| ⑩    | 000003  | 4   | Screw, socket, countersunk, M8 x 20, plated |

## Right hand suction nozzle skirt

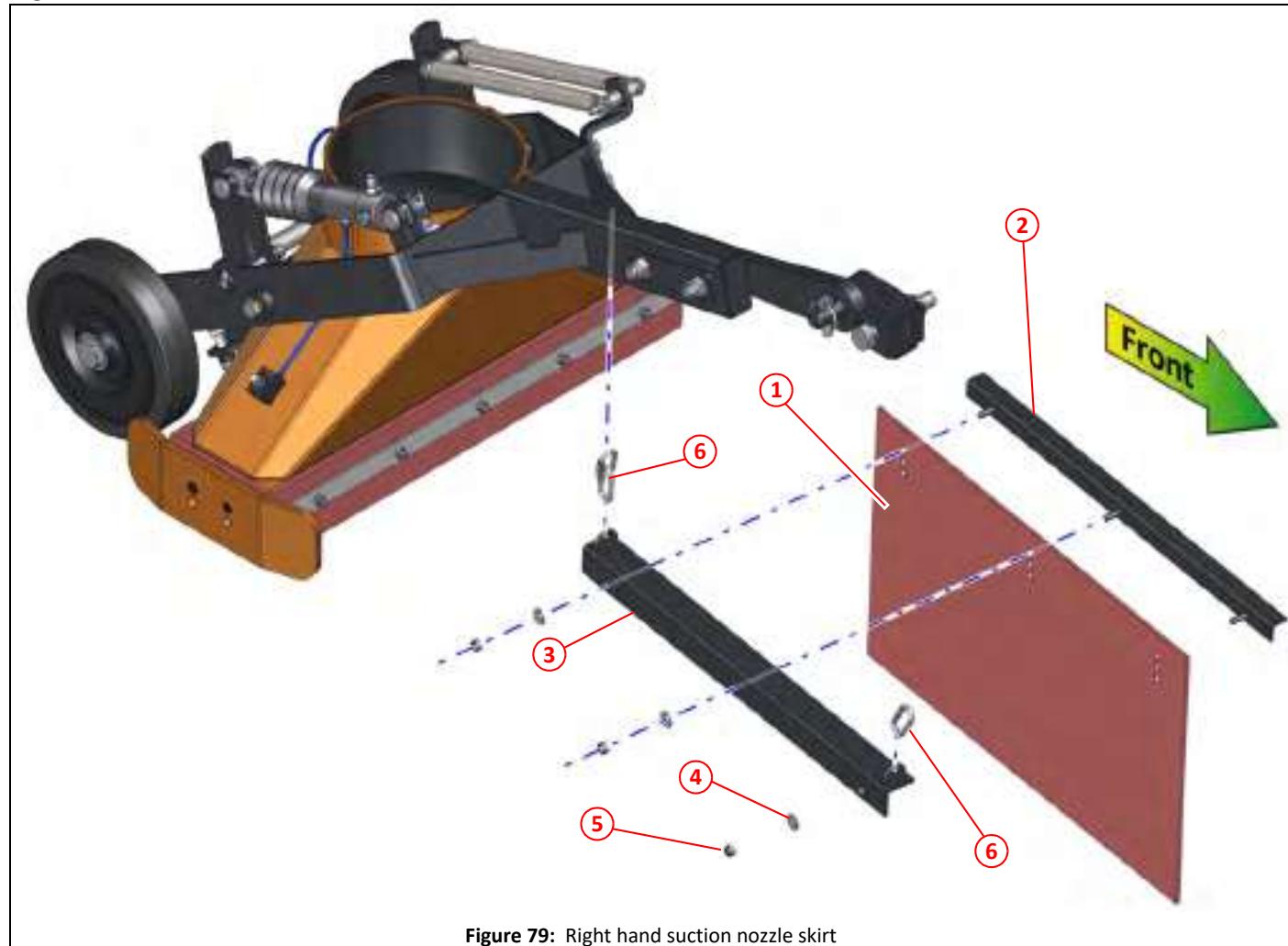


Figure 79: Right hand suction nozzle skirt

| Item | Part No | Qty | Description                |  |
|------|---------|-----|----------------------------|--|
| ①    | 010247  | 1   | Skirt, 3-pitch, heavy duty |  |
| ②    | 010275  | 1   | Skirt clamp                |  |
| ③    | 013145  | 1   | Skirt angle                |  |
| ④    | 011092  | 3   | Washer M8                  |  |
| ⑤    | 011073  | 3   | Nyloc nut T M8             |  |
| ⑥    | 010606  | 3   | Caribiner                  |  |

## Right hand suction nozzle frame

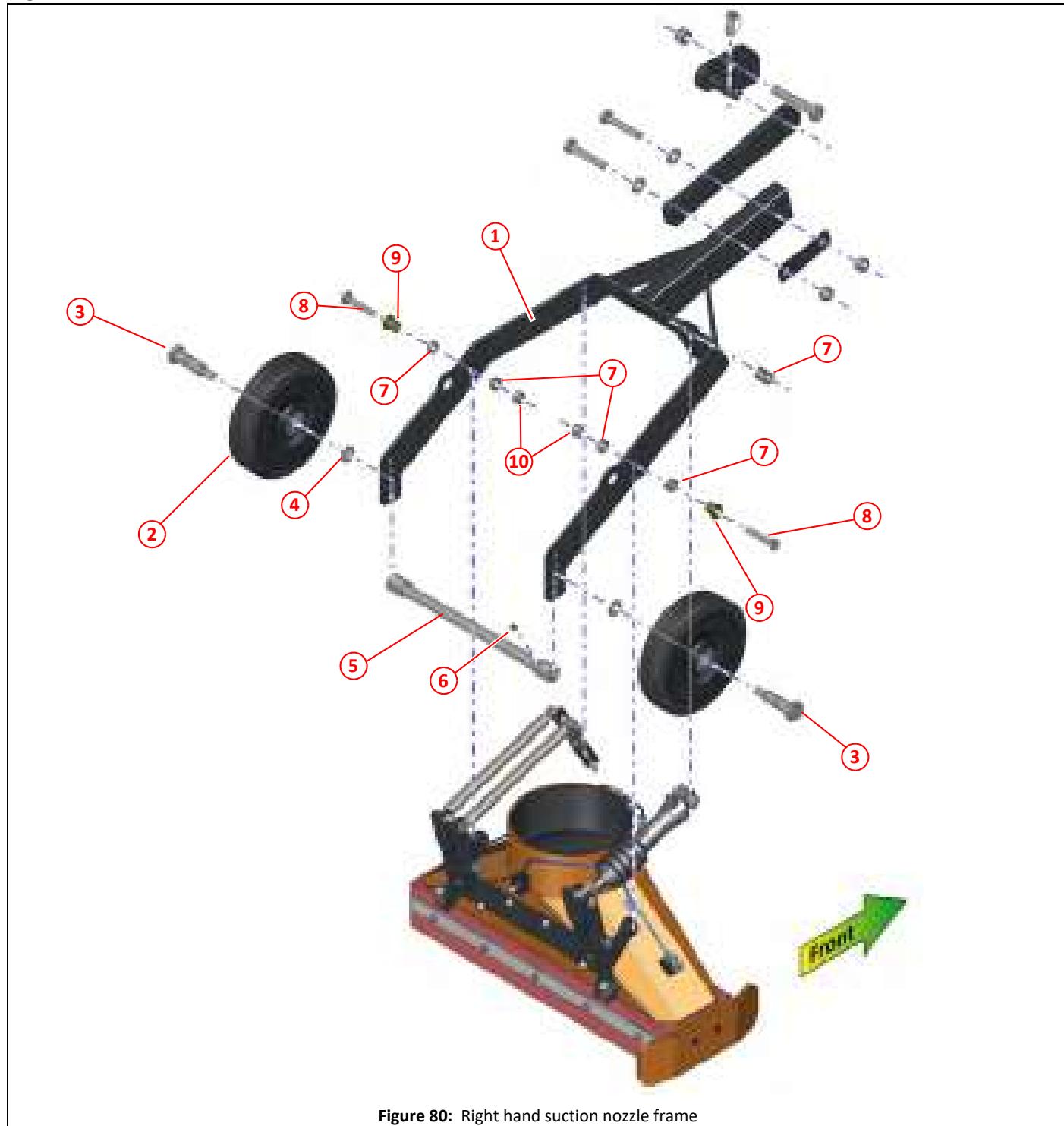


Figure 80: Right hand suction nozzle frame

| Item | Part No | Qty | Description                                  |
|------|---------|-----|--|
| ①    | 047129  | 1   | Nozzle frame, righthand                      |
| ②    | 020331  | 2   | Wheel, nozzle, Ø250                          |
| ③    | 020332  | 2   | Axle bolt, nozzle                            |
| ④    | 011135  | 2   | Washer M16                                   |
| ⑤    | 020333  | 1   | Axle   |
| ⑥    | 010903  | 1   | Grease nipple, straight, $\frac{1}{8}$ " BSP |
| ⑦    | 024682  | 6   | Bush Ø25 x Ø20 x 10                          |
| ⑧    | 000351  | 2   | Setscrew M14 x 70                            |
| ⑨    | 021416  | 2   | Sleeve, suction nozzle                       |
| ⑩    | 011127  | 2   | Nyloc nut T M14                              |

## Right hand suction nozzle tow hitch

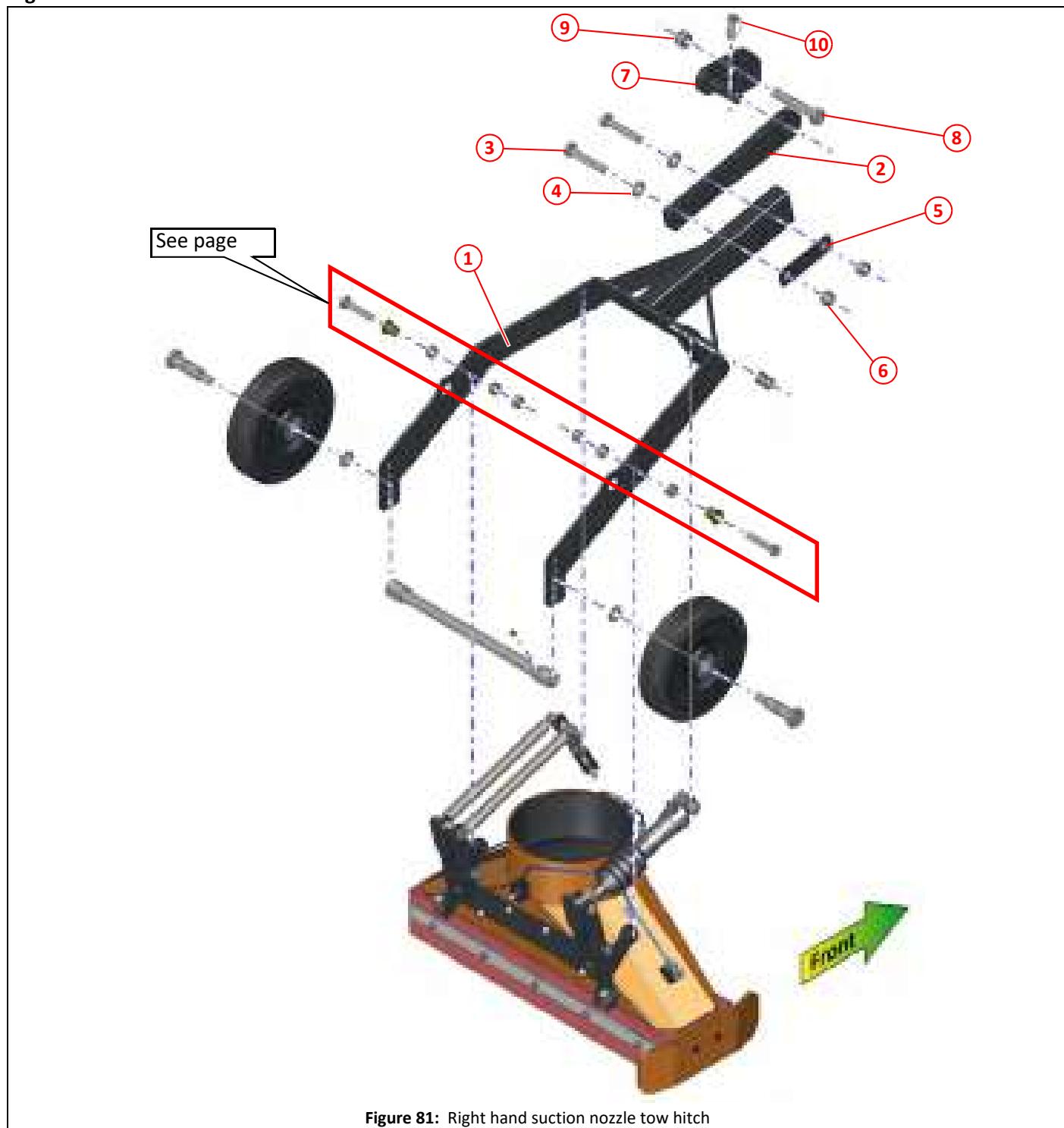


Figure 81: Right hand suction nozzle tow hitch

| Item | Part No | Qty | Description              |  |
|------|---------|-----|--------------------------|--|
| ①    | 047129  | 1   | Nozzle frame, right hand |  |
| ②    | 047130  | 1   | Tow hitch, nozzle        |  |
| ③    | 000043  | 2   | Bolt M16 x 90            |  |
| ④    | 011135  | 2   | Washer M16               |  |
| ⑤    | 045492  | 1   | Backing plate            |  |
| ⑥    | 011060  | 2   | Nyloc nut T M16          |  |
| ⑦    | 045465  | 1   | Tow pin, nozzle          |  |
| ⑧    | 011422  | 1   | Bolt M20 x 110           |  |
| ⑨    | 011082  | 1   | Nyloc nut T M20          |  |
| ⑩    | 013053  | 1   | Lynch pin                |  |

## Right hand suction nozzle pivot

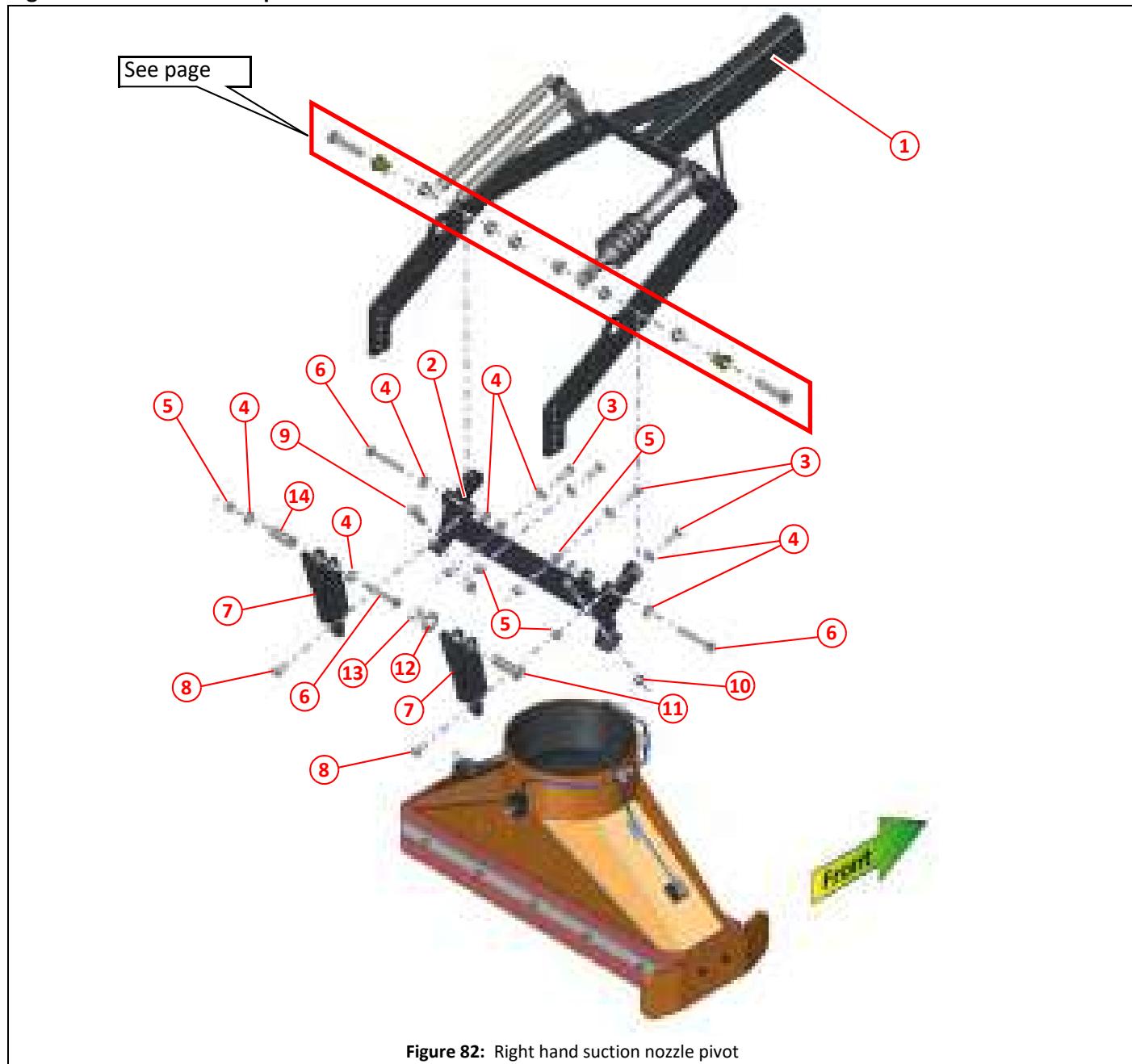


Figure 82: Right hand suction nozzle pivot

| Item | Part No | Qty | Description                                    |
|------|---------|-----|--|
| ①    | 047129  | 1   | Nozzle frame, right hand                       |
| ②    | 047114  | 1   | Nozzle pivot                                   |
| ③    | 011032  | 4   | Setscrew M10 x 30                              |
| ④    | 011094  | 10  | Washer M10                                     |
| ⑤    | 011075  | 5   | Nyloc nut T M10                                |
| ⑥    | 011038  | 3   | Bolt M10 x 80                                  |
| ⑦    | 047116  | 2   | Mounting bracket, spring/ram                   |
| ⑧    | 011031  | 2   | Setscrew M10 x 25                              |
| ⑨    | 011054  | 2   | Setscrew M12 x 45                              |
| ⑩    | 011076  | 2   | Full nut M12                                   |
| ⑪    | 046749  | 1   | Clevis pin ø20 x 60                            |
| ⑫    | 011102  | 1   | Washer M20                                     |
| ⑬    | 011122  | 1   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ " |
| ⑭    | 047136  | 1   | Spring boss ø10.5 x 55, double stepped         |

## Right hand suction nozzle tilt ram

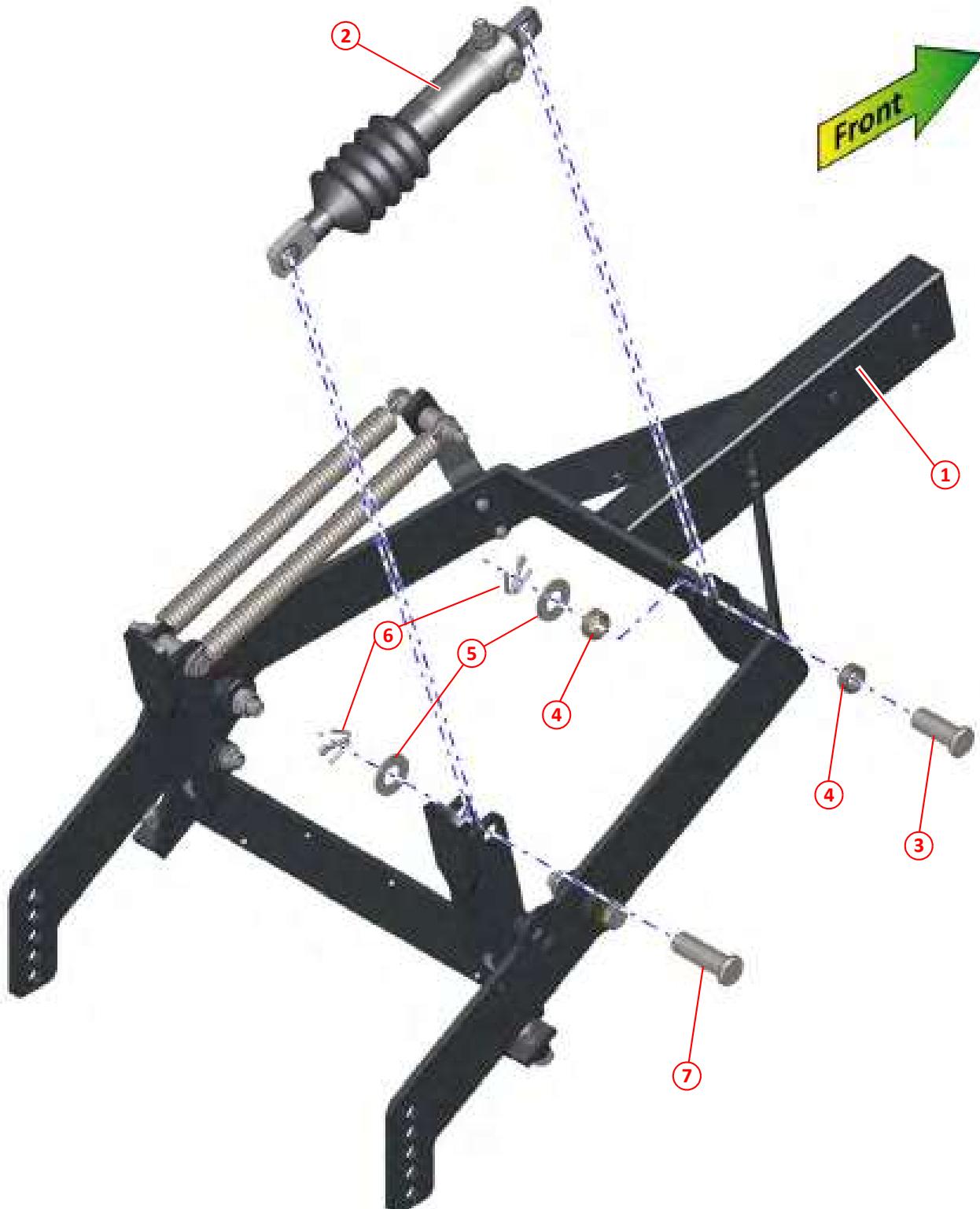


Figure 83: Right hand suction nozzle tilt ram

| Item | Part No | Qty | Description                                    |
|------|---------|-----|--|
| ①    | 047129  | 1   | Nozzle frame, right hand                       |
| ②    | 041955  | 1   | Hydraulic ram assembly, nozzle tilt            |
| ③    | 046750  | 1   | Clevis pin ø20 x 50                            |
| ④    | 024682  | 2   | Bush ø25 x ø20 x 10                            |
| ⑤    | 011102  | 2   | Washer M20                                     |
| ⑥    | 011122  | 2   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ " |
| ⑦    | 046749  | 1   | Clevis pin ø20 x 60                            |

## Right hand suction nozzle tilt return springs

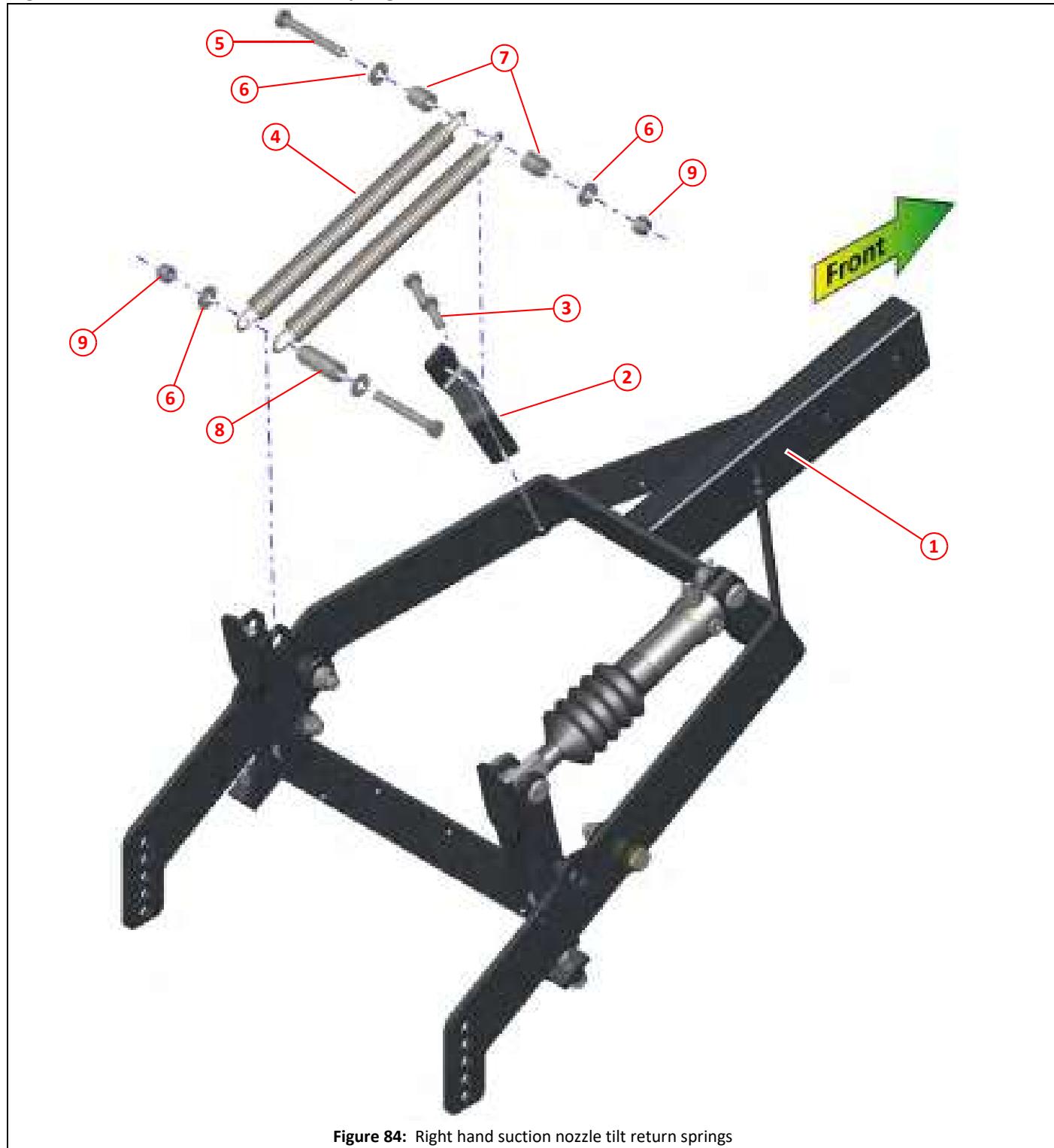
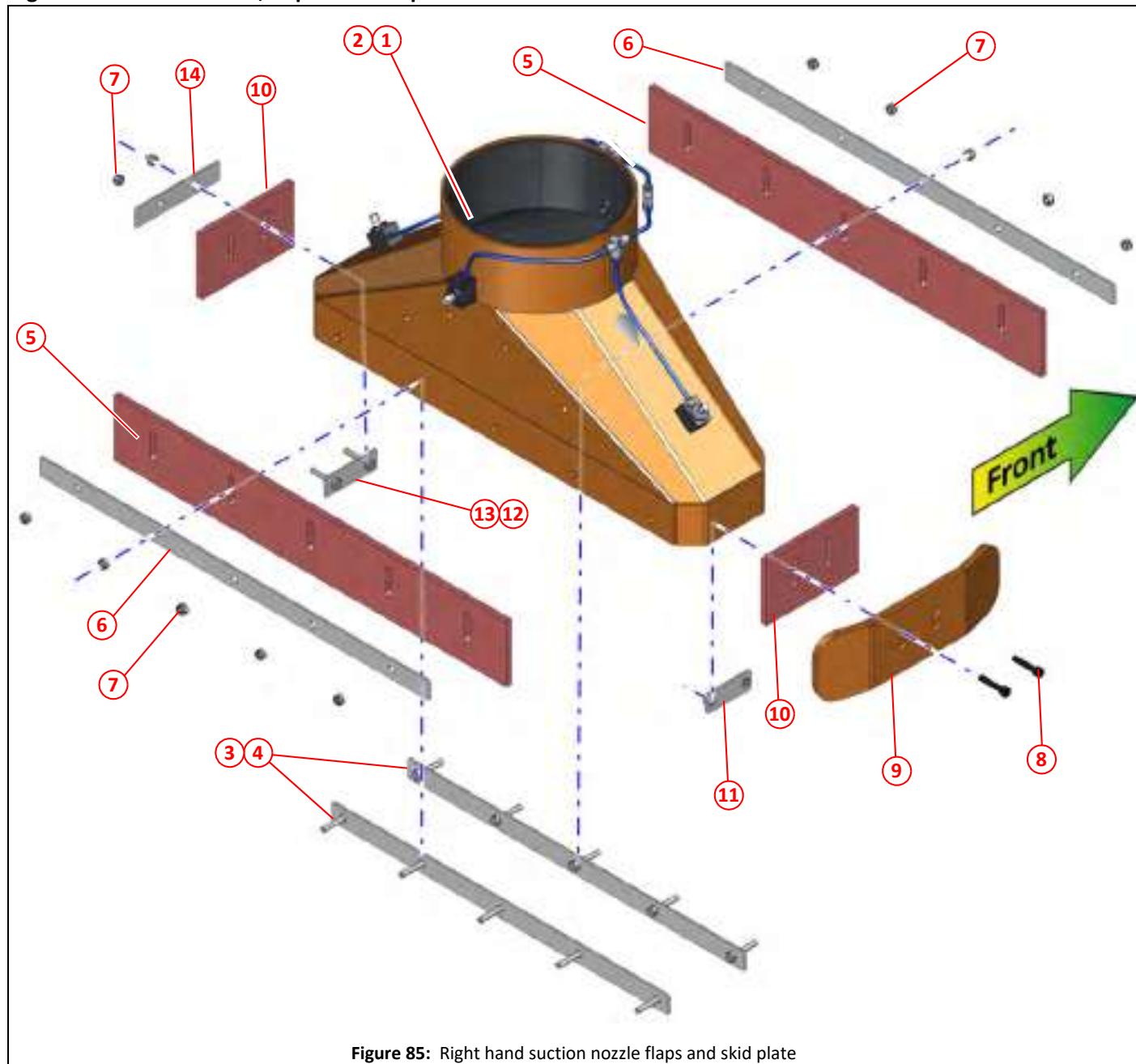


Figure 84: Right hand suction nozzle tilt return springs

| Item | Part No | Qty | Description                               |  |
|------|---------|-----|---|--|
| ①    | 047128  | 1   | Nozzle frame, left hand                   |  |
| ②    | 047126  | 1   | Spring bracket, suction nozzle, left hand |  |
| ③    | 011032  | 2   | Setscrew M10 x 30                         |  |
| ④    | 010017  | 2   | Spring                                    |  |
| ⑤    | 011038  | 2   | Bolt M10 x 80                             |  |
| ⑥    | 011094  | 4   | Washer M10                                |  |
| ⑦    | 047135  | 2   | Spring boss, ø10.5 x 23.5, stepped        |  |
| ⑧    | 047136  | 1   | Spring boss ø10.5 x 55, double stepped    |  |
| ⑨    | 011075  | 2   | Nyloc nut T M10                           |  |

**Right hand suction nozzle, flaps and skid plate**

**Figure 85:** Right hand suction nozzle flaps and skid plate

| Item | Part No | Qty | Description                                    |  |
|------|---------|-----|--|--|
| ①    | 047107  | 1   | Suction nozzle                                 |  |
| ②    | 047988  | 1   | Suction nozzle, PU lined                       |  |
| ③    | 047110  | 2   | Flap clamp, long                               |  |
| ④    | 048513  | 2   | Flap clamp, long, for PU lined suction nozzle  |  |
| ⑤    | 047108  | 2   | Flap, long, suction nozzle                     |  |
| ⑥    | 047112  | 2   | Flap clamp strip, long                         |  |
| ⑦    | 011073  | 12  | Nyloc nut T M8                                 |  |
| ⑧    | 000096  | 2   | Socket cap screw M8 x 40                       |  |
| ⑨    | 047115  | 1   | Skid plate                                     |  |
| ⑩    | 047109  | 2   | Flap, short                                    |  |
| ⑪    | 047323  | 1   | Skid plate clamp strip                         |  |
| ⑫    | 047113  | 1   | Flap clamp, short                              |  |
| ⑬    | 048512  | 1   | Flap clamp, short, for PU lined suction nozzle |  |
| ⑭    | 047111  | 1   | Flap clamp strip, short                        |  |

## Right hand suction nozzle, water

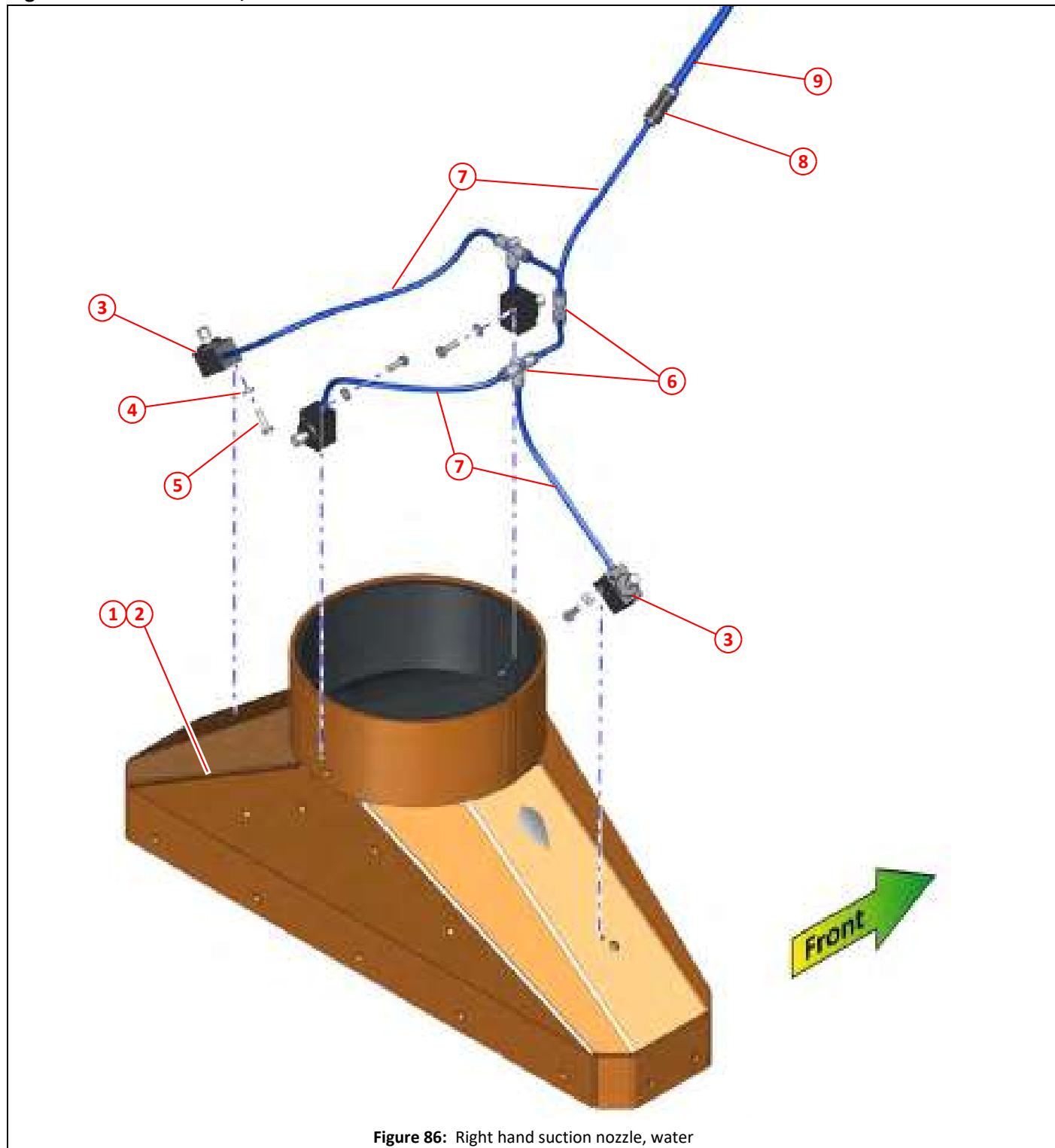


Figure 86: Right hand suction nozzle, water

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 047107  | 1   | Suction nozzle  |
| ②    | 047988  | 1   | Suction nozzle, PU lined                                |
| ③    | 034342  | 4   | Water nozzle, low pressure                              |
| ④    | 011091  | 4   | Spring washer M6  |
| ⑤    | 011067  | 4   | Setscrew M6 x 20  |
| ⑥    | 024647  | 3   | 6mm Tee, grey   |
| ⑦    | 035733  | 6   | Blue flexible nylon tubing, ø6mm, (length as required)  |
| ⑧    | 041029  | 1   | Push in adapter, straight, ø10mm to ø6mm                |
| ⑨    | 041031  | 1   | Blue flexible nylon tubing, ø10mm, (length as required) |

## Left hand suction spigot

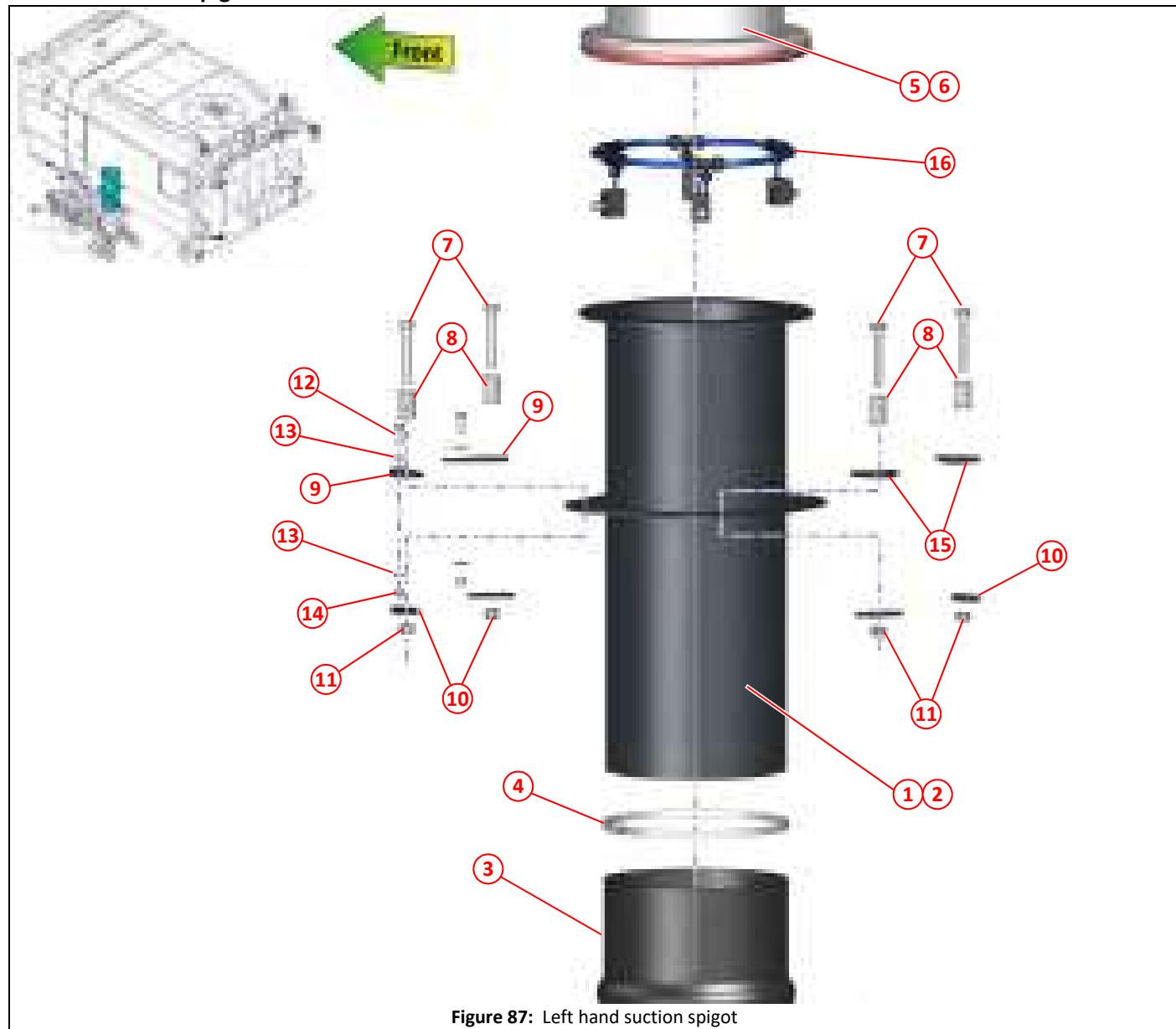
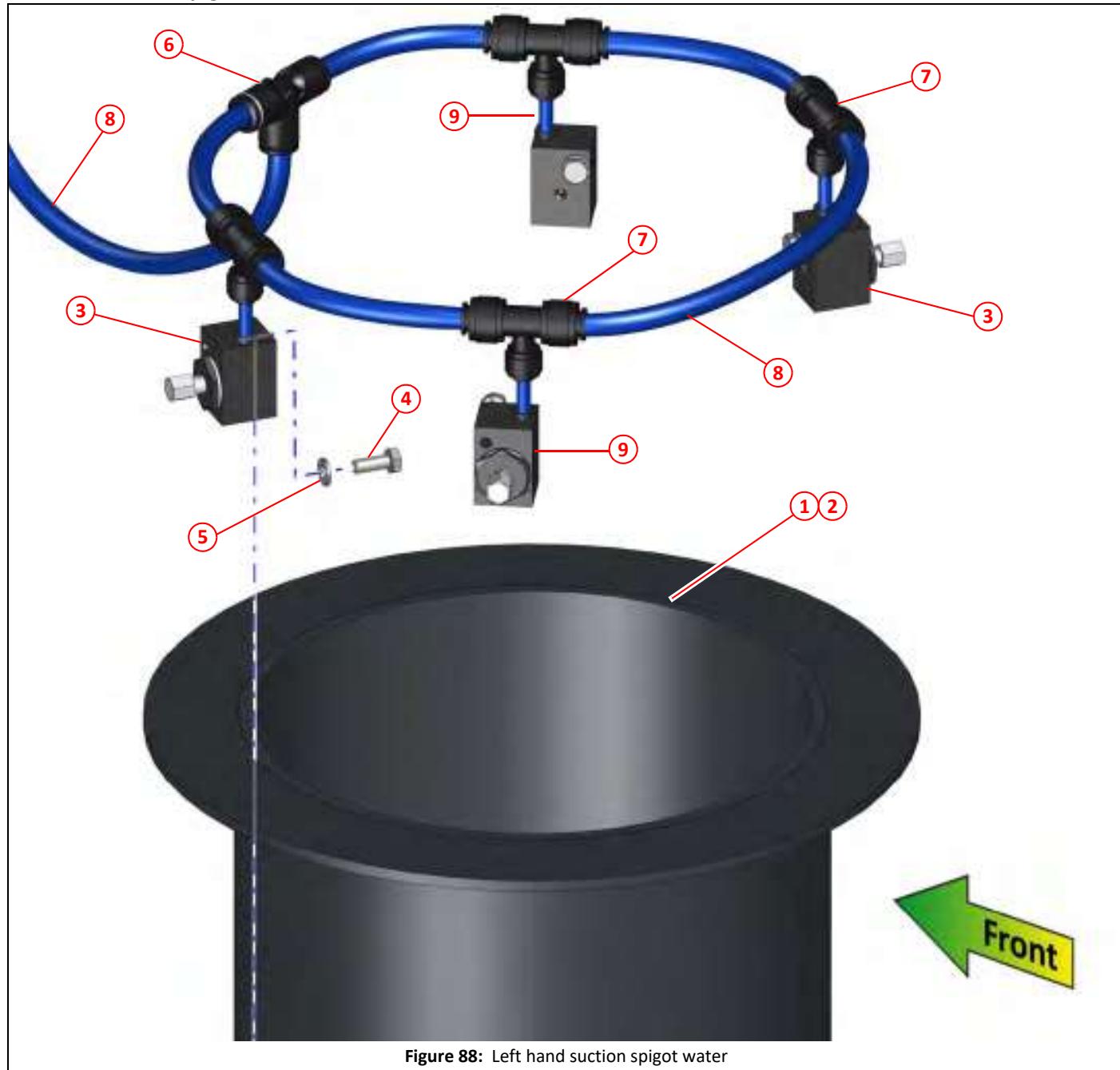


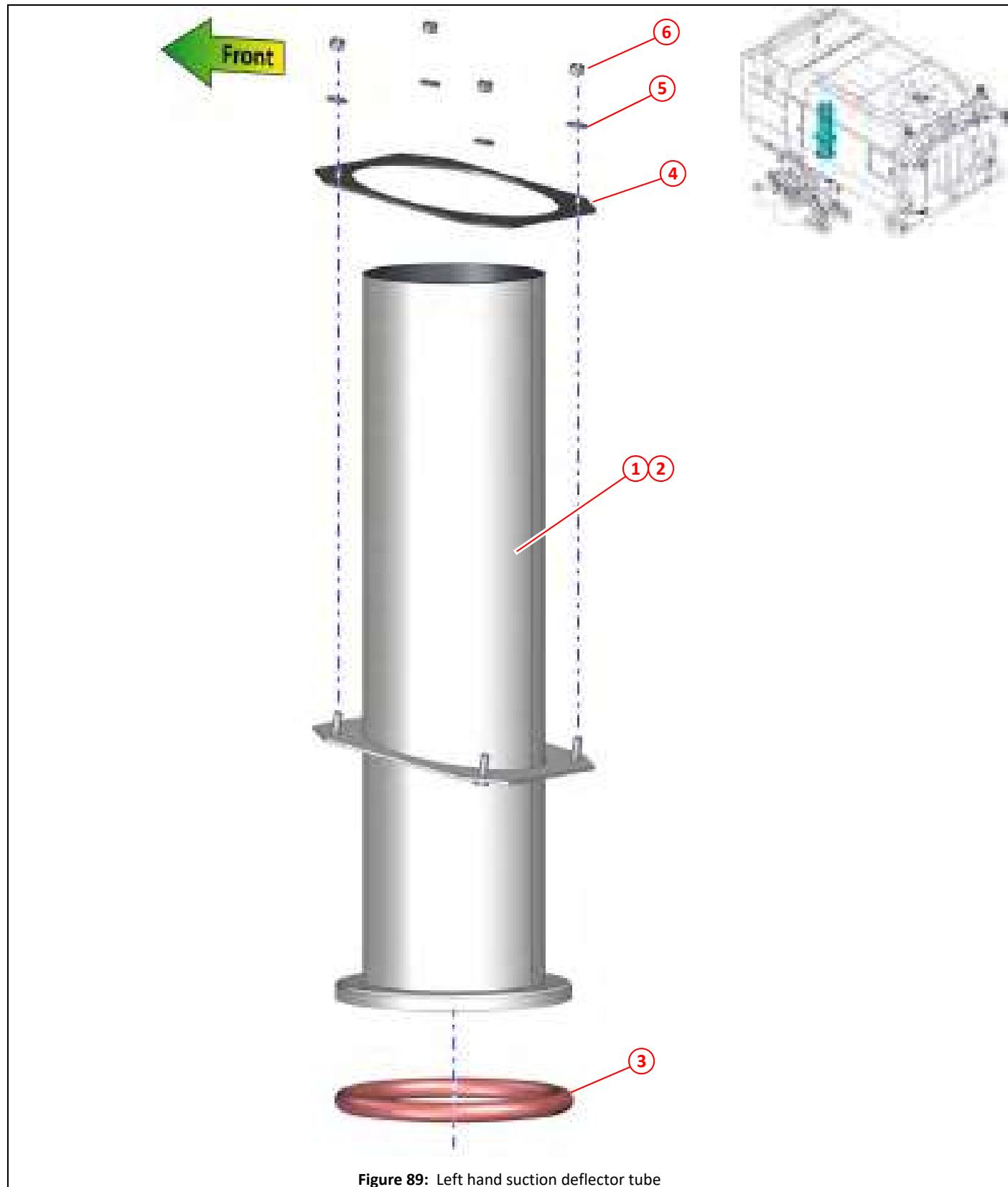
Figure 87: Left hand suction spigot

| Item | Part No | Qty | Description                       |     |
|------|---------|-----|-----------------------------------|-----|
| ①    | 043043  | 1   | Suction spigot                    |     |
| ②    | 051136  | 1   | Suction spigot, PU lined          |     |
| ③    | 013028  | 1   | Suction hose                      |     |
| ④    | 012933  | 1   | Jubilee clip No 10.50 (235 - 267) |     |
| ⑤    | 047012  | 1   | Deflector tube                    |     |
| ⑥    | 047989  | 1   | Deflector tube, PU lined          |     |
| ⑦    | 000110  | 4   | Bolt M12 x 80                     |     |
| ⑧    | 042694  | 4   | Spring                            |     |
| ⑨    | 043392  | 2   | Locking washer, suction spigot    |     |
| ⑩    | 039989  | 4   | Washer, suction spigot            |     |
| ⑪    | 011077  | 4   | Nyloc nut T M12                   |     |
| ⑫    | 011011  | 2   | Setscrew M8 x 25                  |     |
| ⑬    | 011092  | 4   | Washer M8                         |     |
| ⑭    | 011073  | 2   | Nyloc nut T M8                    |     |
| ⑮    | 043044  | 2   | Spring seat, suction spigot       |     |
| ⑯    |         | 1   | Suction spigot water arrangement  | 108 |

## Left hand suction spigot water

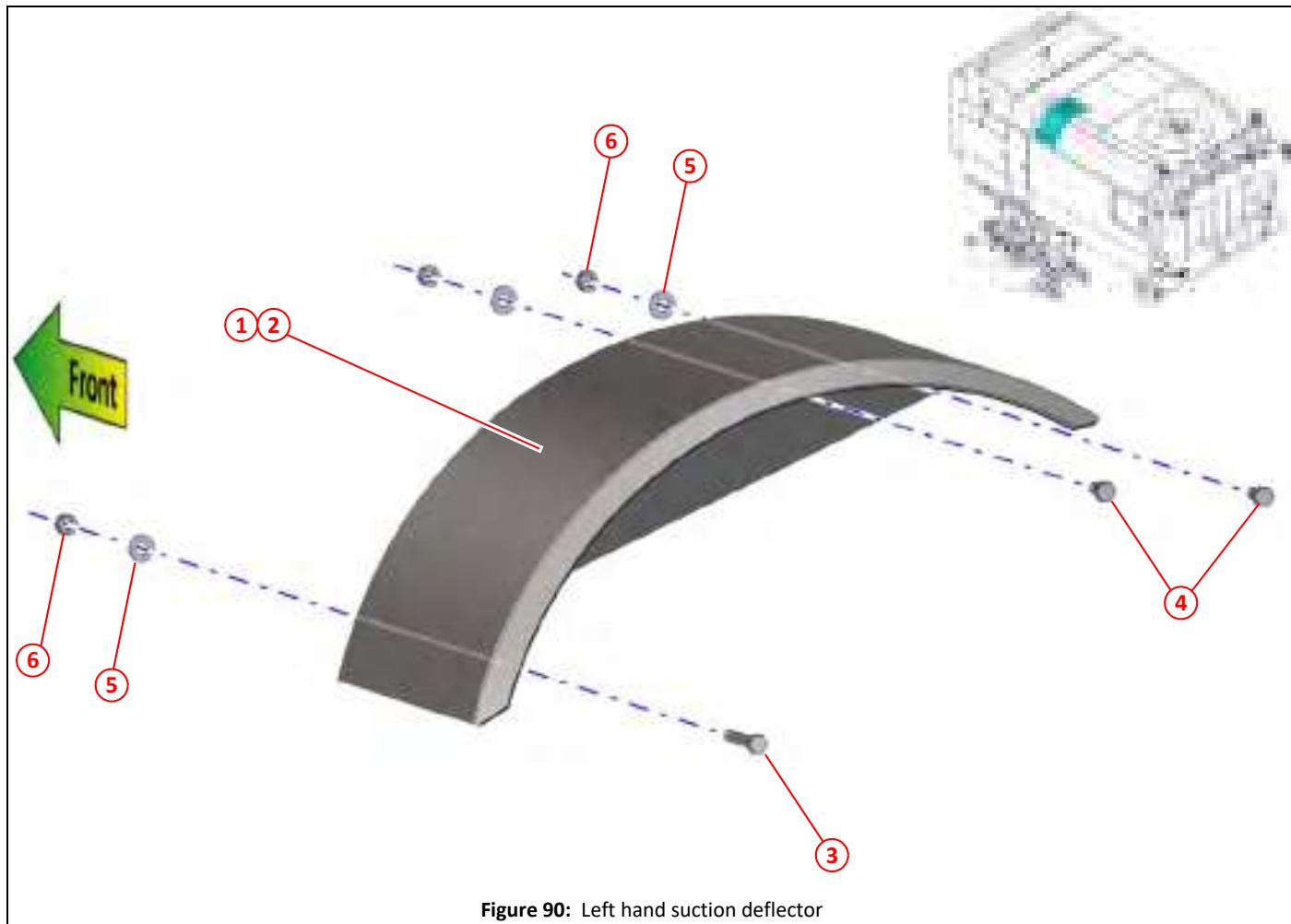


| Item | Part No | Qty | Description   |  |
|------|---------|-----|---|--|
| ①    | 043043  | 1   | Suction spigot  |  |
| ②    | 051136  | 1   | Suction spigot, PU lined                                |  |
| ③    | 034342  | 4   | Water nozzle, low pressure                              |  |
| ④    | 011001  | 4   | Setscrew M6 x 16  |  |
| ⑤    | 011091  | 4   | Spring washer M6  |  |
| ⑥    | 041030  | 1   | Push in tee, equal, ø10                                 |  |
| ⑦    | 047778  | 4   | Push in tee, ø10 x ø10 x ø6, reducer on branch          |  |
| ⑧    | 041031  | 6   | Blue flexible nylon tubing, ø10mm, (length as required) |  |
| ⑨    | 035733  | 4   | Blue flexible nylon tubing, ø6mm, (length as required)  |  |

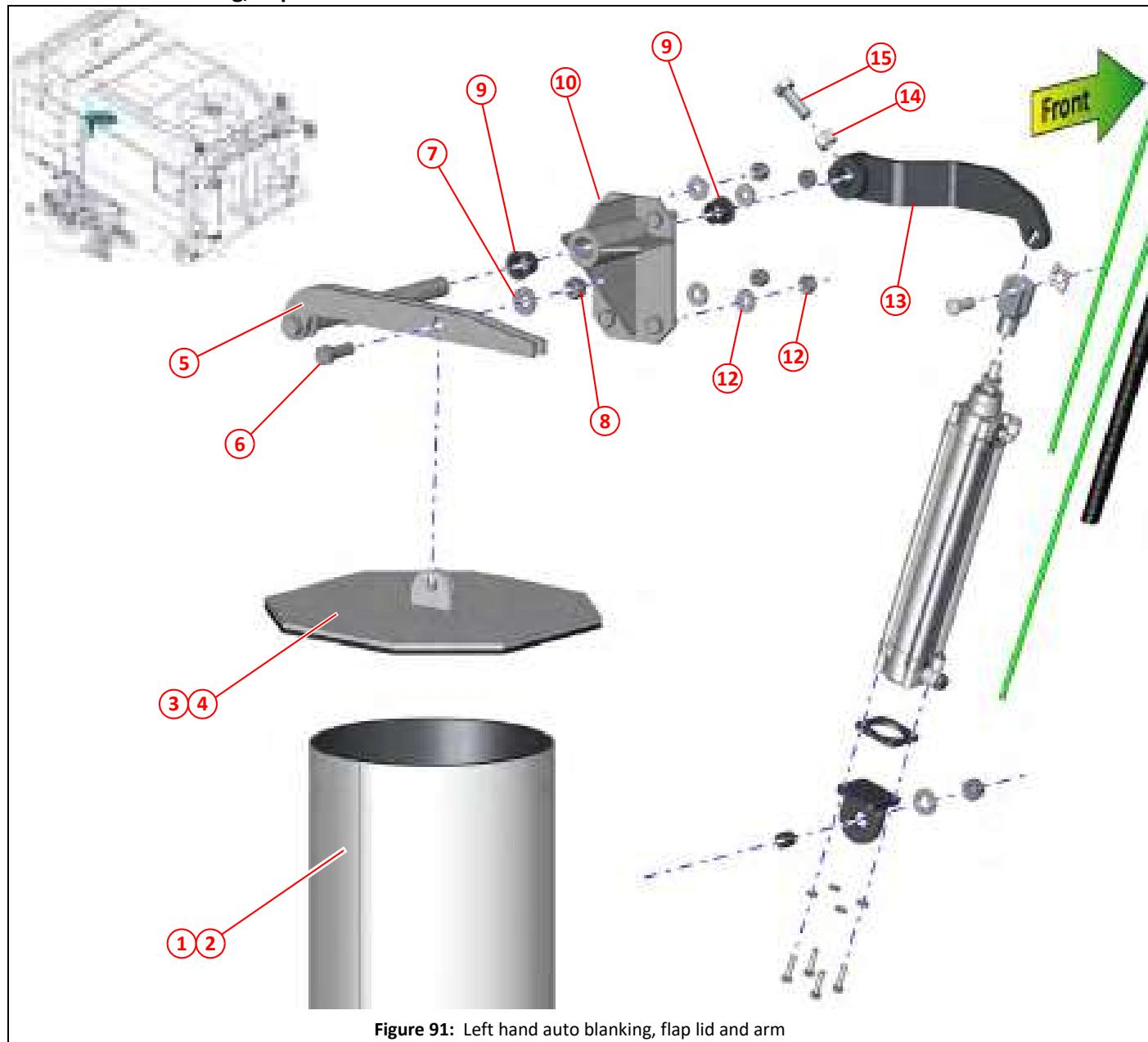
**Left hand suction deflector tube**


| Item | Part No | Qty | Description                      |  |
|------|---------|-----|----------------------------------|--|
| ①    | 047012  | 1   | Deflector tube                   |  |
| ②    | 047989  | 1   | Deflector tube, PU lined         |  |
| ③    | 039140  | 1   | Seal, deflector tube             |  |
| ④    | 044674  | 1   | Gasket, deflector tube           |  |
| ⑤    | 000277  | 4   | Washer M12, stainless steel      |  |
| ⑥    | 000275  | 4   | Nyloc nut T M12, stainless steel |  |

## Left hand suction deflector



| Item | Part No | Qty | Description                        |
|------|---------|-----|------------------------------------|
| ①    | 022644  | 1   | Suction deflector                  |
| ②    | 050823  | 1   | Suction deflector, PU lined        |
| ③    | 000274  | 1   | Bolt M12 x 70, stainless steel     |
| ④    | 000273  | 2   | Setscrew M12 x 25, stainless steel |
| ⑤    | 000277  | 3   | Washer M12, stainless steel        |
| ⑥    | 000275  | 3   | Nyloc nut T M12, stainless steel   |

**Left hand auto blanking, flap lid and arm**

**Figure 91: Left hand auto blanking, flap lid and arm**

| Item | Part No | Qty | Description                               |
|------|---------|-----|---|
| ①    | 047012  | 1   | Deflector tube                            |
| ②    | 047989  | 1   | Deflector tube, PU lined                  |
| ③    | 021514  | 1   | Flap lid                                  |
| ④    | 050717  | 1   | Flap lid, PU lined                        |
| ⑤    | 021517  | 1   | Flap lid arm, left hand                   |
| ⑥    | 000278  | 1   | Setscrew M12 x 40                         |
| ⑦    | 000277  | 1   | Washer M12, stainless steel               |
| ⑧    | 000275  | 1   | Nyloc nut T M12, stainless steel          |
| ⑨    | 013488  | 2   | Bush                                      |
| ⑩    | 021164  | 1   | Flap pivot, auto blanking                 |
| ⑪    | 011094  | 4   | Washer M10                                |
| ⑫    | 011075  | 4   | Nyloc nut T M10                           |
| ⑬    | 034396  | 1   | Flap arm, left hand                       |
| ⑭    | 000279  | 1   | Full nut M12 x 1.25, stainless steel      |
| ⑮    | 000276  | 1   | Setscrew M12 x 1.25 x 35, stainless steel |

## Left hand auto blanking, pneumatic cylinder

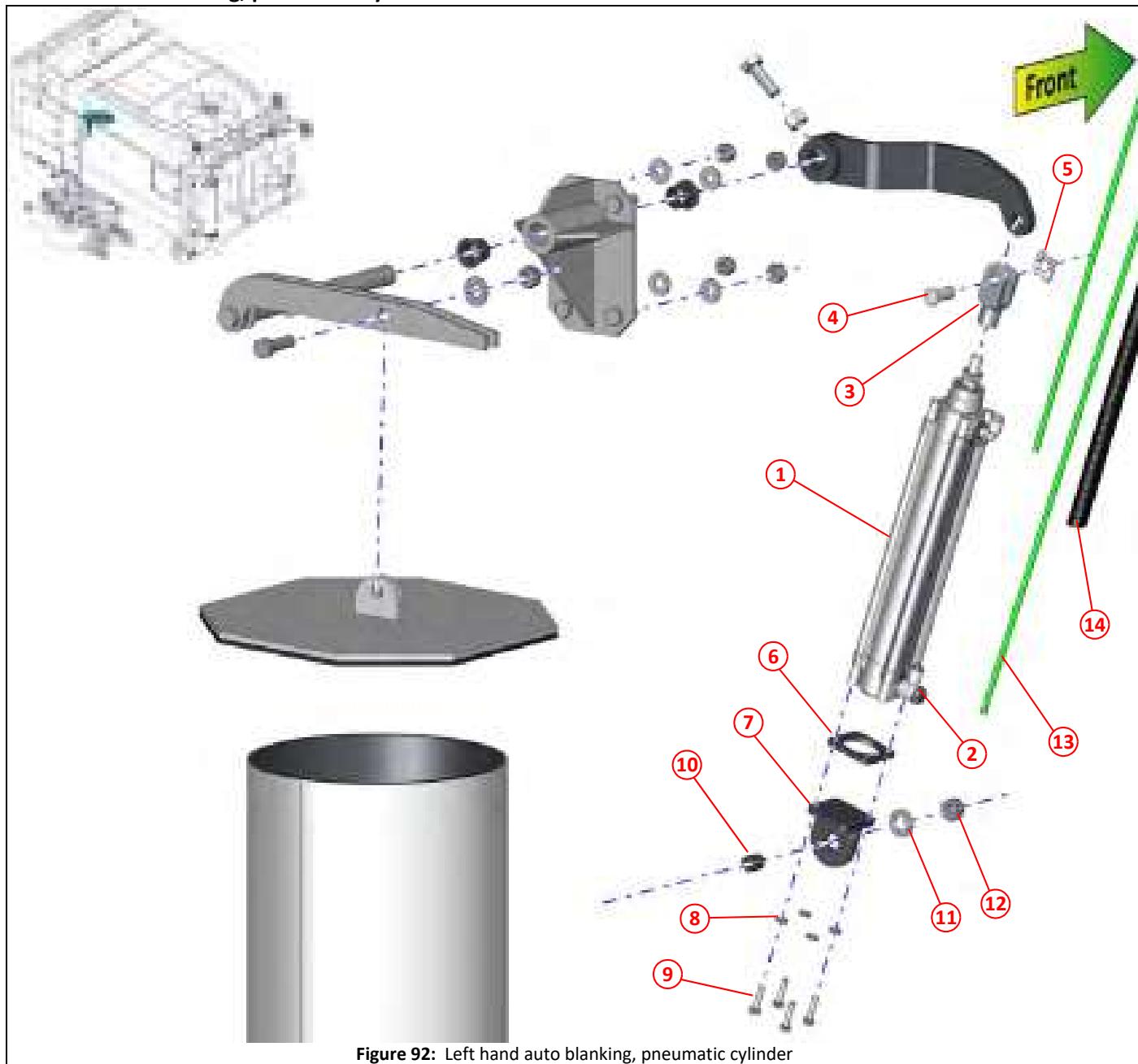
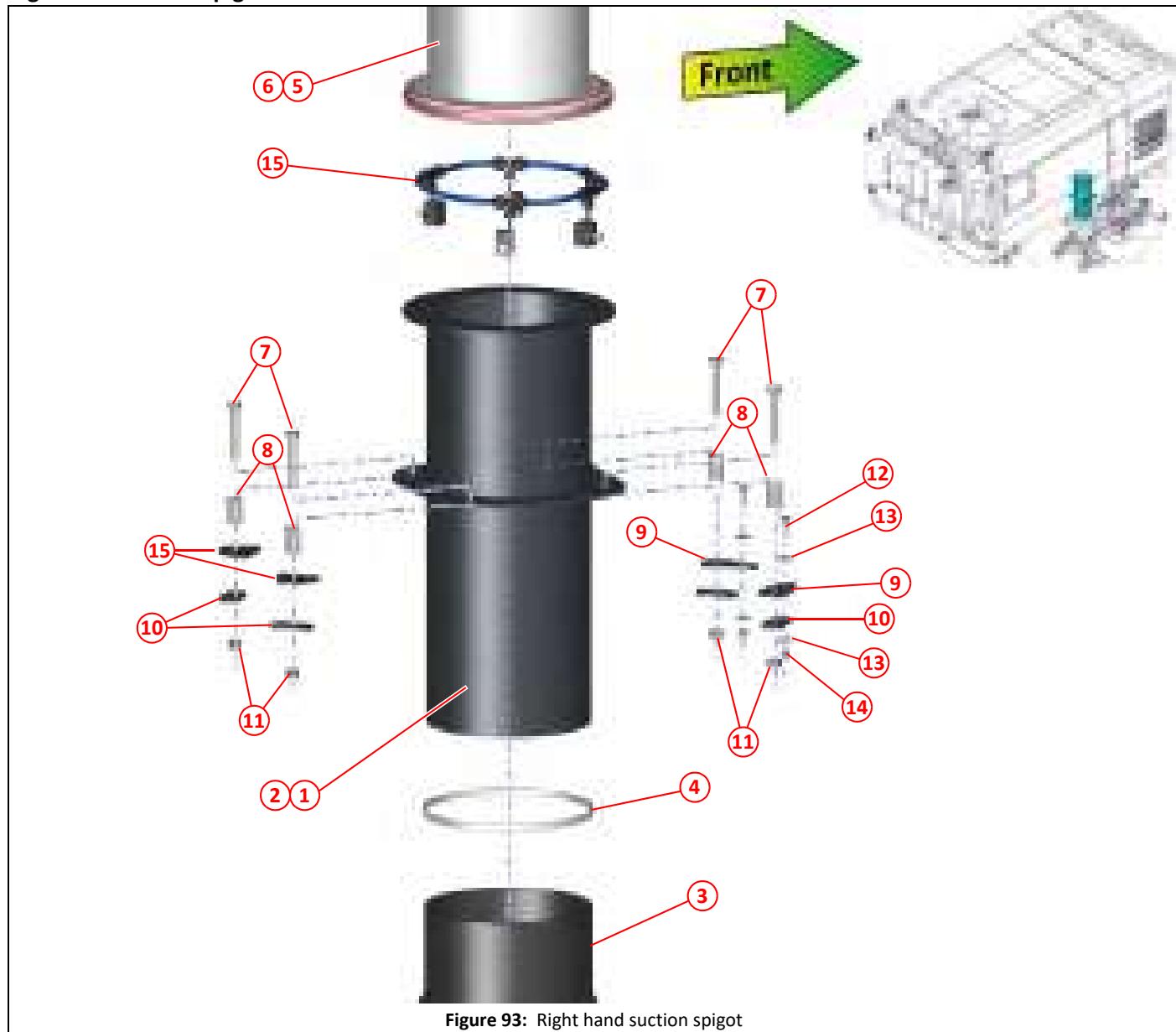


Figure 92: Left hand auto blanking, pneumatic cylinder

| Item | Part No | Qty | Description                             |
|------|---------|-----|---|
| ①    | 021467  | 1   | Pneumatic cylinder ø40 x 200            |
| ②    | 021158  | 1   | Pneumatic flow regulator                |
| ③    | 014469  | 1   | Clevis, M12, pneumatic cylinder         |
| ④    | 023270  | 1   | Clevis ø12                              |
| ⑤    | 023269  | 1   | Safety fastener ø12                     |
| ⑥    | 045502  | 1   | Spacer, auto blanking cylinder          |
| ⑦    | 014457  | 1   | Cylinder mount                          |
| ⑧    | 011091  | 4   | Spring washer M6                        |
| ⑨    | 011087  | 4   | Setscrew M6 x 25                        |
| ⑩    | 010950  | 1   | Hose $\frac{3}{8}$ ", cut to 20mm       |
| ⑪    | 000277  | 1   | Washer M12                              |
| ⑫    | 000275  | 1   | Nyloc nut T M12, stainless steel        |
| ⑬    | 024650  | 2   | ø6mm green air pipe, length as required |
| ⑭    | 004210  | 1   | Flexible, conduit, split ø21            |

**Right hand suction spigot**

**Figure 93: Right hand suction spigot**

| Item | Part No | Qty | Description                       |
|------|---------|-----|-----------------------------------|
| ①    | 043043  | 1   | Suction spigot                    |
| ②    | 051136  | 1   | Suction spigot, PU lined          |
| ③    | 013028  | 1   | Suction hose                      |
| ④    | 012933  | 1   | Jubilee clip No 10.50 (235 - 267) |
| ⑤    | 047012  | 1   | Deflector tube                    |
| ⑥    | 047989  | 1   | Deflector tube, PU lined          |
| ⑦    | 000110  | 4   | Bolt M12 x 80                     |
| ⑧    | 042694  | 4   | Spring                            |
| ⑨    | 043392  | 2   | Locking washer, suction spigot    |
| ⑩    | 039989  | 4   | Washer, suction spigot            |
| ⑪    | 011077  | 4   | Nyloc nut T M12                   |
| ⑫    | 011011  | 2   | Setscrew M8 x 25                  |
| ⑬    | 011092  | 4   | Washer M8                         |
| ⑭    | 011073  | 2   | Nyloc nut T M8                    |
| ⑮    | 043044  | 2   | Spring seat, suction spigot       |
| ⑯    |         | 1   | Suction spigot water arrangement  |

## Right hand suction spigot water

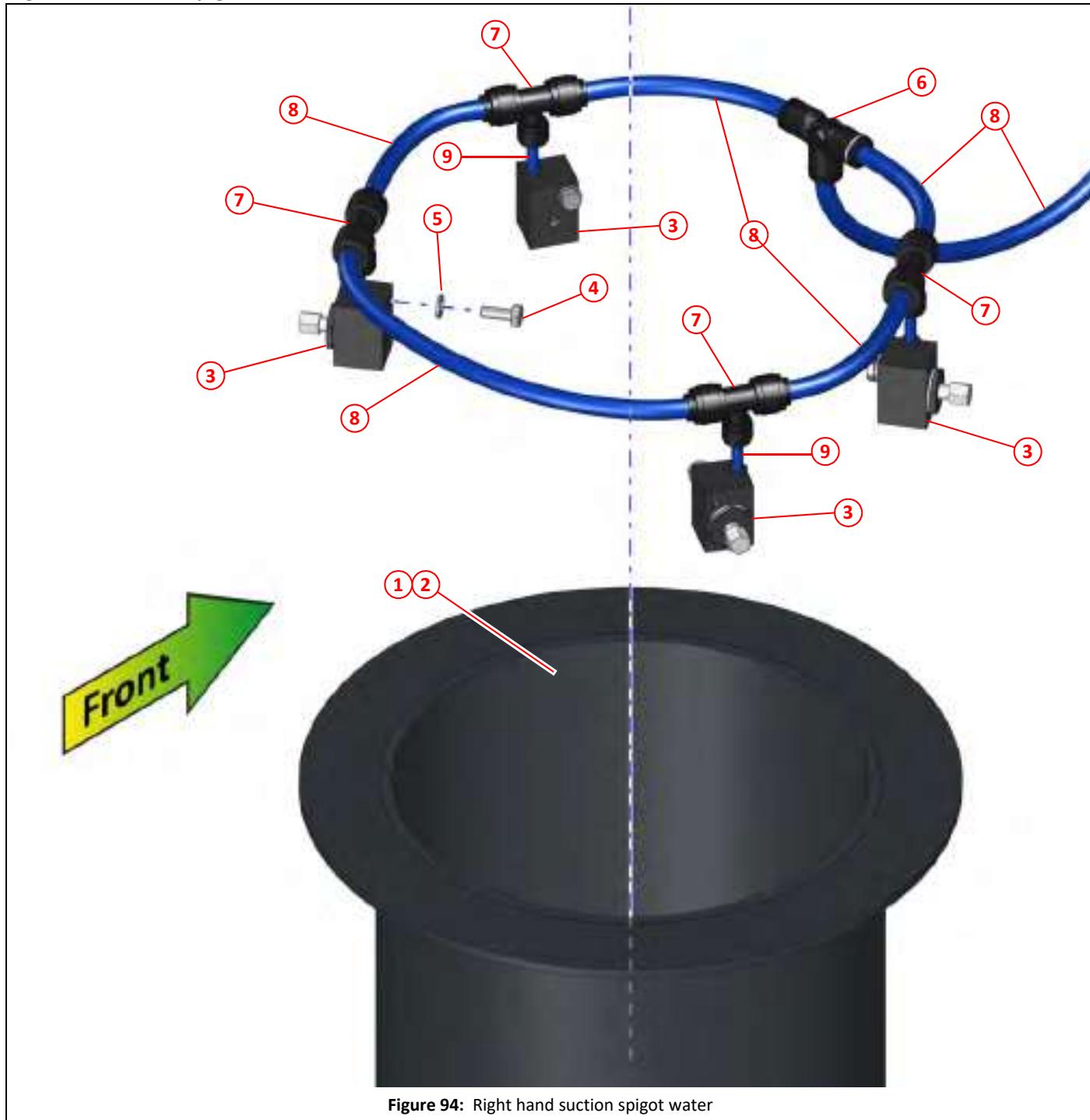


Figure 94: Right hand suction spigot water

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 043043  | 1   | Suction spigot  |
| ②    | 051136  | 1   | Suction spigot, PU lined                                |
| ③    | 034342  | 4   | Water nozzle, low pressure                              |
| ④    | 011001  | 4   | Setscrew M6 x 16  |
| ⑤    | 011091  | 4   | Spring washer M6  |
| ⑥    | 041030  | 1   | Push in tee, equal, ø10                                 |
| ⑦    | 047778  | 4   | Push in tee, ø10 x ø10 x ø6, reducer on branch          |
| ⑧    | 041031  | 6   | Blue flexible nylon tubing, ø10mm, (length as required) |
| ⑨    | 035733  | 4   | Blue flexible nylon tubing, ø6mm, (length as required)  |

## Right hand suction deflector tube

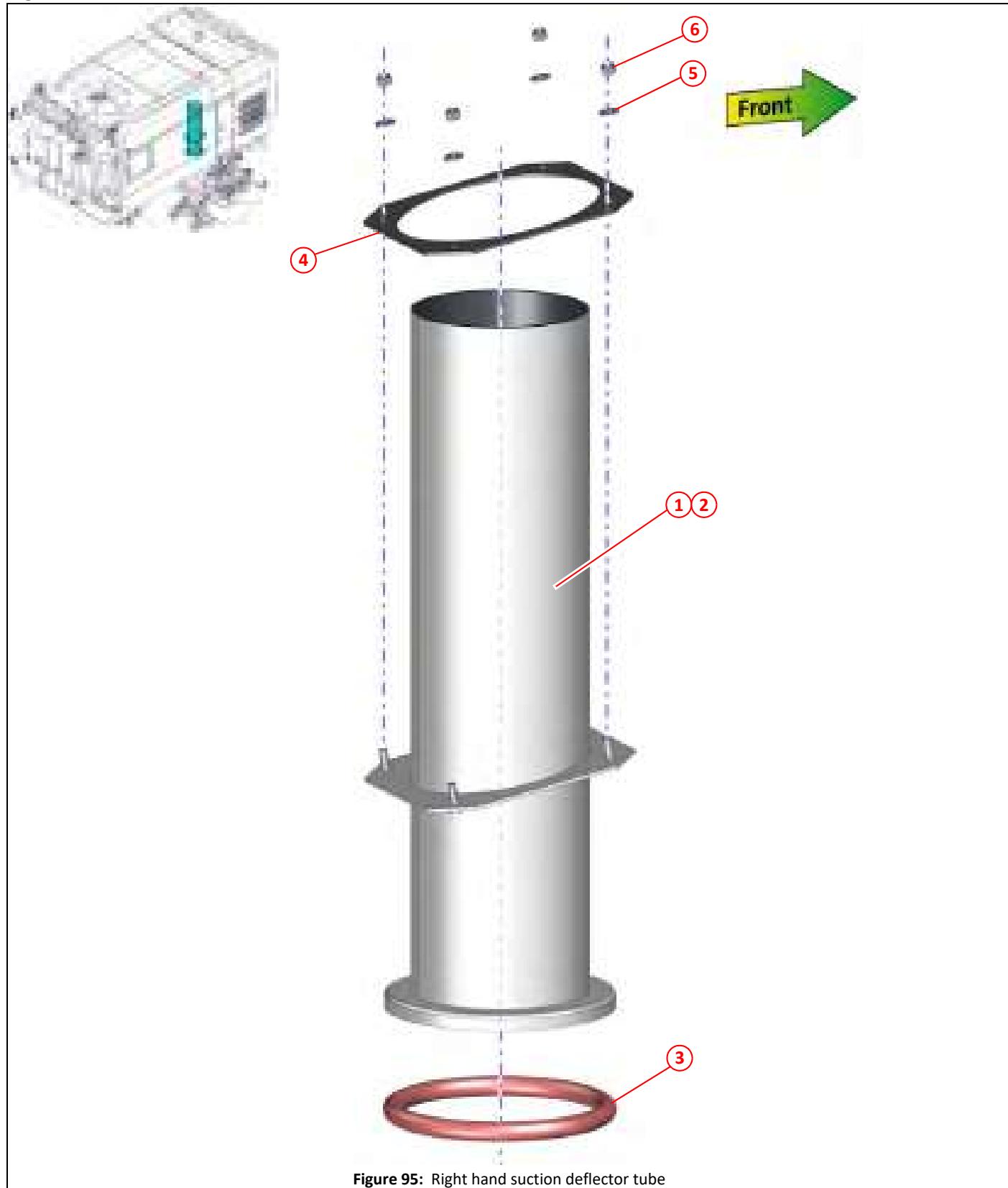


Figure 95: Right hand suction deflector tube

| Item | Part No | Qty | Description                      |  |
|------|---------|-----|----------------------------------|--|
| ①    | 047012  | 1   | Deflector tube                   |  |
| ②    | 047989  | 1   | Deflector tube, PU lined         |  |
| ③    | 039140  | 1   | Seal, deflector tube             |  |
| ④    | 044674  | 1   | Gasket, deflector tube           |  |
| ⑤    | 000277  | 4   | Washer M12, stainless steel      |  |
| ⑥    | 000275  | 4   | Nyloc nut T M12, stainless steel |  |

## Right hand suction deflector

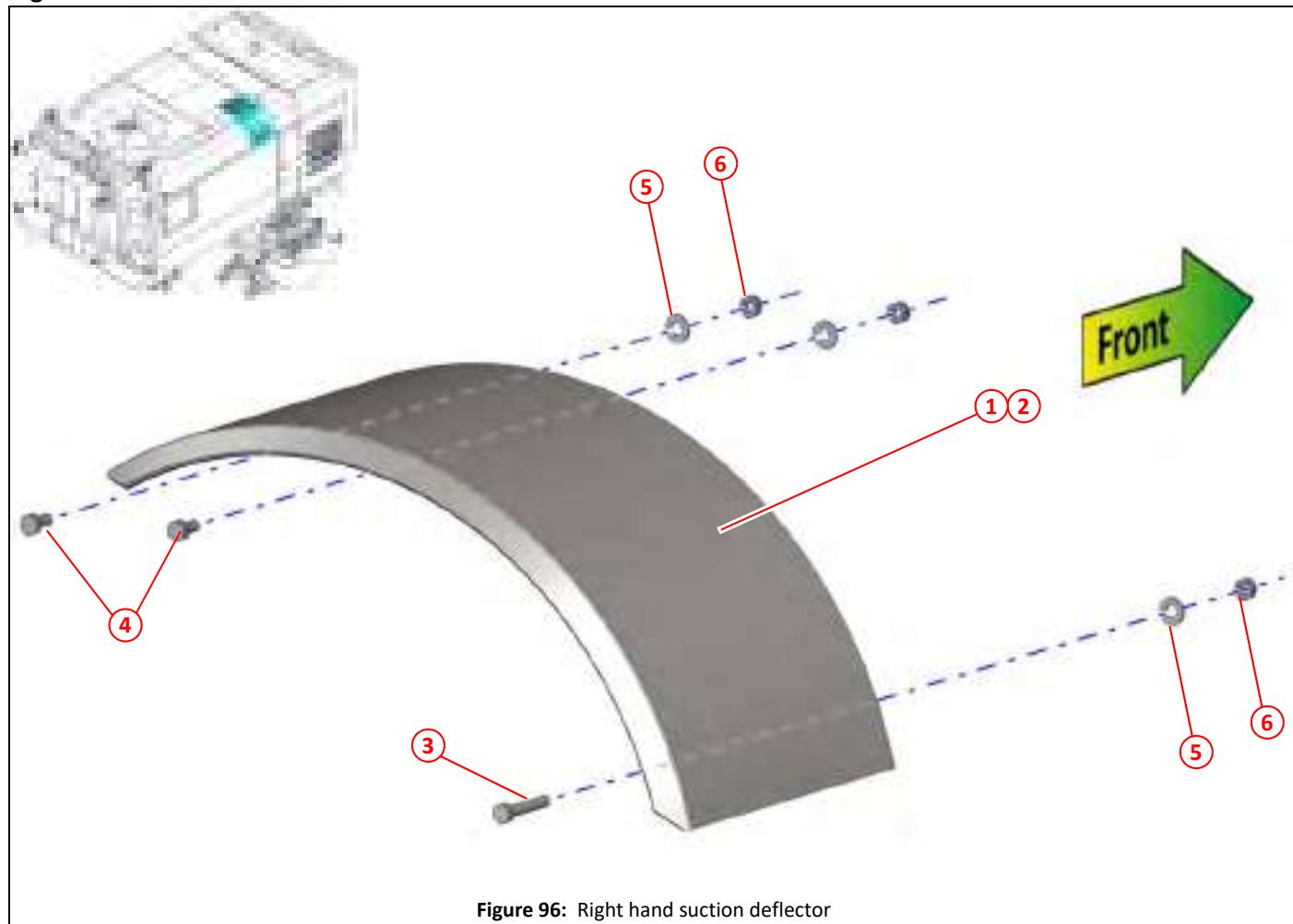
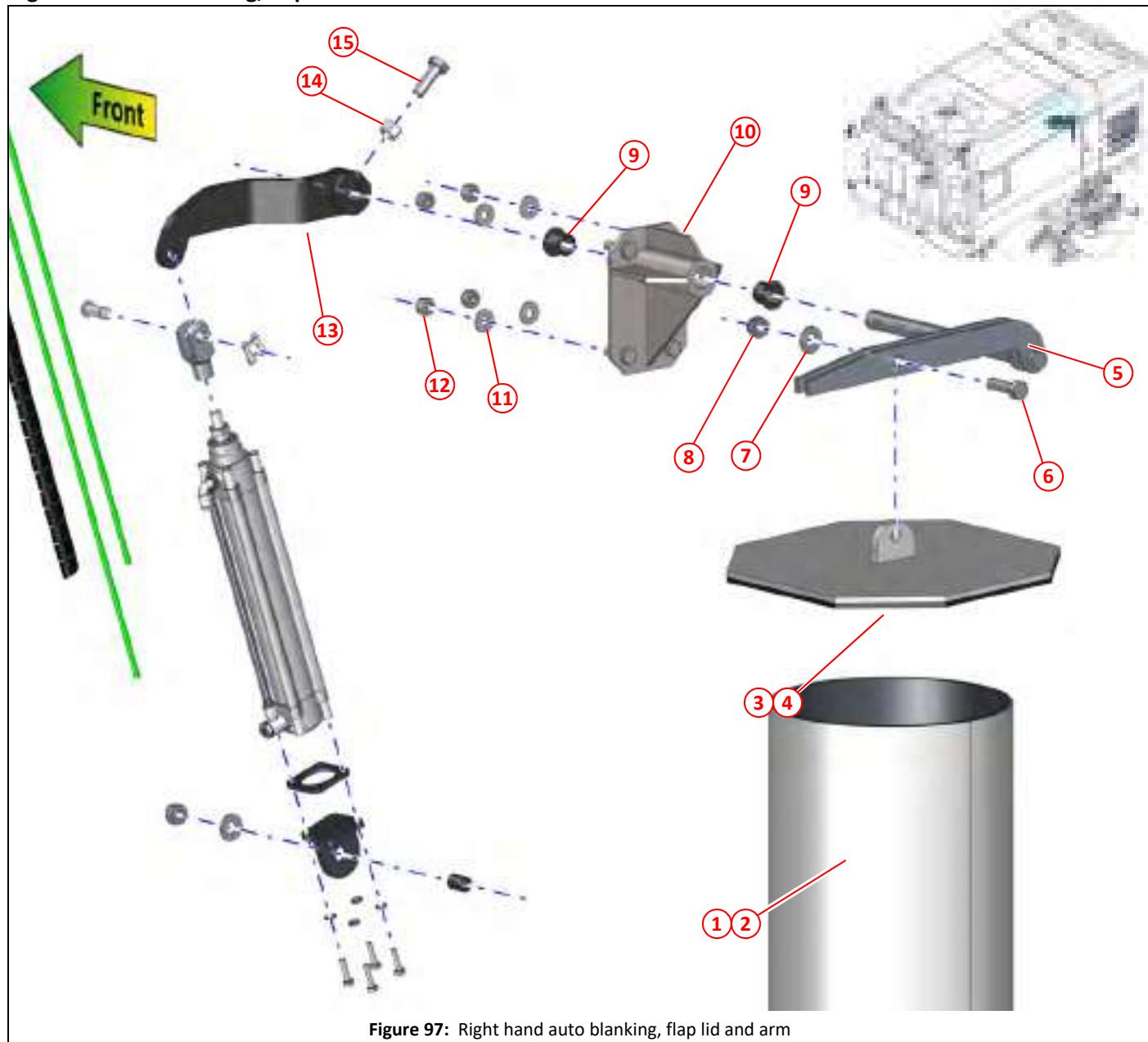


Figure 96: Right hand suction deflector

| Item | Part No | Qty | Description                        |  |
|------|---------|-----|------------------------------------|--|
| ①    | 022644  | 1   | Suction deflector                  |  |
| ②    | 050823  | 1   | Suction deflector, PU lined        |  |
| ③    | 000274  | 1   | Bolt M12 x 70, stainless steel     |  |
| ④    | 000273  | 2   | Setscrew M12 x 25, stainless steel |  |
| ⑤    | 000277  | 3   | Washer M12, stainless steel        |  |
| ⑥    | 000275  | 3   | Nyloc nut T M12, stainless steel   |  |

**Right hand auto blanking, flap lid and arm**

**Figure 97: Right hand auto blanking, flap lid and arm**

| Item | Part No | Qty | Description                               |
|------|---------|-----|---|
| ①    | 047012  | 1   | Deflector tube                            |
| ②    | 047989  | 1   | Deflector tube, PU lined                  |
| ③    | 021514  | 1   | Flap lid                                  |
| ④    | 050717  | 1   | Flap lid, PU lined                        |
| ⑤    | 021517  | 1   | Flap lid arm, left hand                   |
| ⑥    | 000278  | 1   | Setscrew M12 x 40                         |
| ⑦    | 000277  | 1   | Washer M12, stainless steel               |
| ⑧    | 000275  | 1   | Nyloc nut T M12, stainless steel          |
| ⑨    | 013488  | 2   | Bush                                      |
| ⑩    | 021164  | 1   | Flap pivot, auto blanking                 |
| ⑪    | 011094  | 4   | Washer M10                                |
| ⑫    | 011075  | 4   | Nyloc nut T M10                           |
| ⑬    | 034396  | 1   | Flap arm, right hand                      |
| ⑭    | 000279  | 1   | Full nut M12 x 1.25, stainless steel      |
| ⑮    | 000276  | 1   | Setscrew M12 x 1.25 x 35, stainless steel |

## Right hand auto blanking, pneumatic cylinder

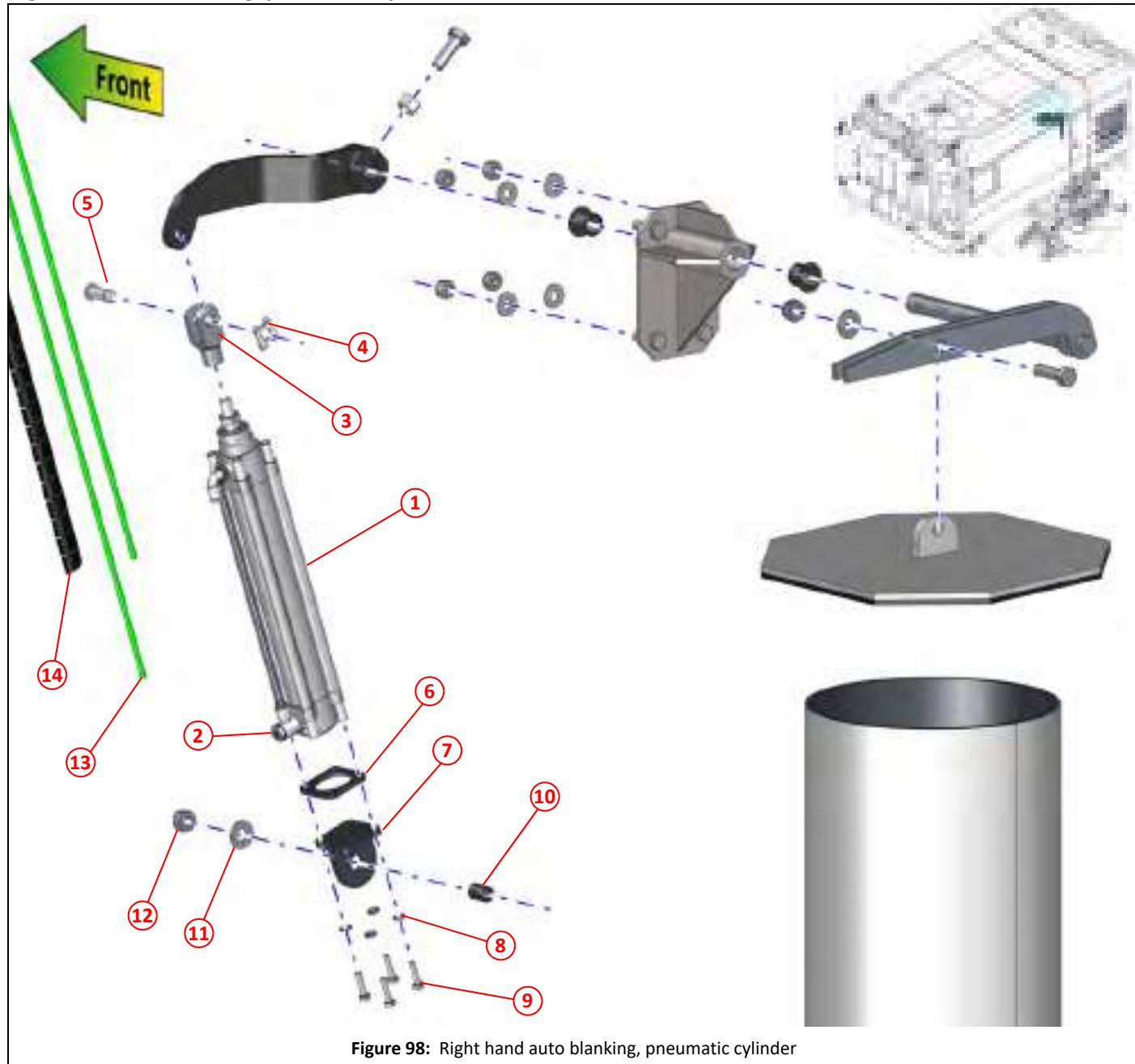


Figure 98: Right hand auto blanking, pneumatic cylinder

| Item | Part No | Qty | Description                             |
|------|---------|-----|---|
| ①    | 021467  | 1   | Pneumatic cylinder ø40 x 200            |
| ②    | 021158  | 1   | Pneumatic flow regulator                |
| ③    | 014469  | 1   | Clevis, M12, pneumatic cylinder         |
| ④    | 023270  | 1   | Clevis ø12                              |
| ⑤    | 023269  | 1   | Safety fastener ø12                     |
| ⑥    | 045502  | 1   | Spacer, auto blanking cylinder          |
| ⑦    | 014457  | 1   | Cylinder mount                          |
| ⑧    | 011091  | 4   | Spring washer M6                        |
| ⑨    | 011087  | 4   | Setscrew M6 x 25                        |
| ⑩    | 010950  | 1   | Hose $\frac{3}{8}$ ", cut to 20mm       |
| ⑪    | 000277  | 1   | Washer M12                              |
| ⑫    | 000275  | 1   | Nyloc nut T M12, stainless steel        |
| ⑬    | 024650  | 2   | ø6mm green air pipe, length as required |
| ⑭    | 004210  | 1   | Flexible, conduit, split ø21            |

## Deflector swing plate

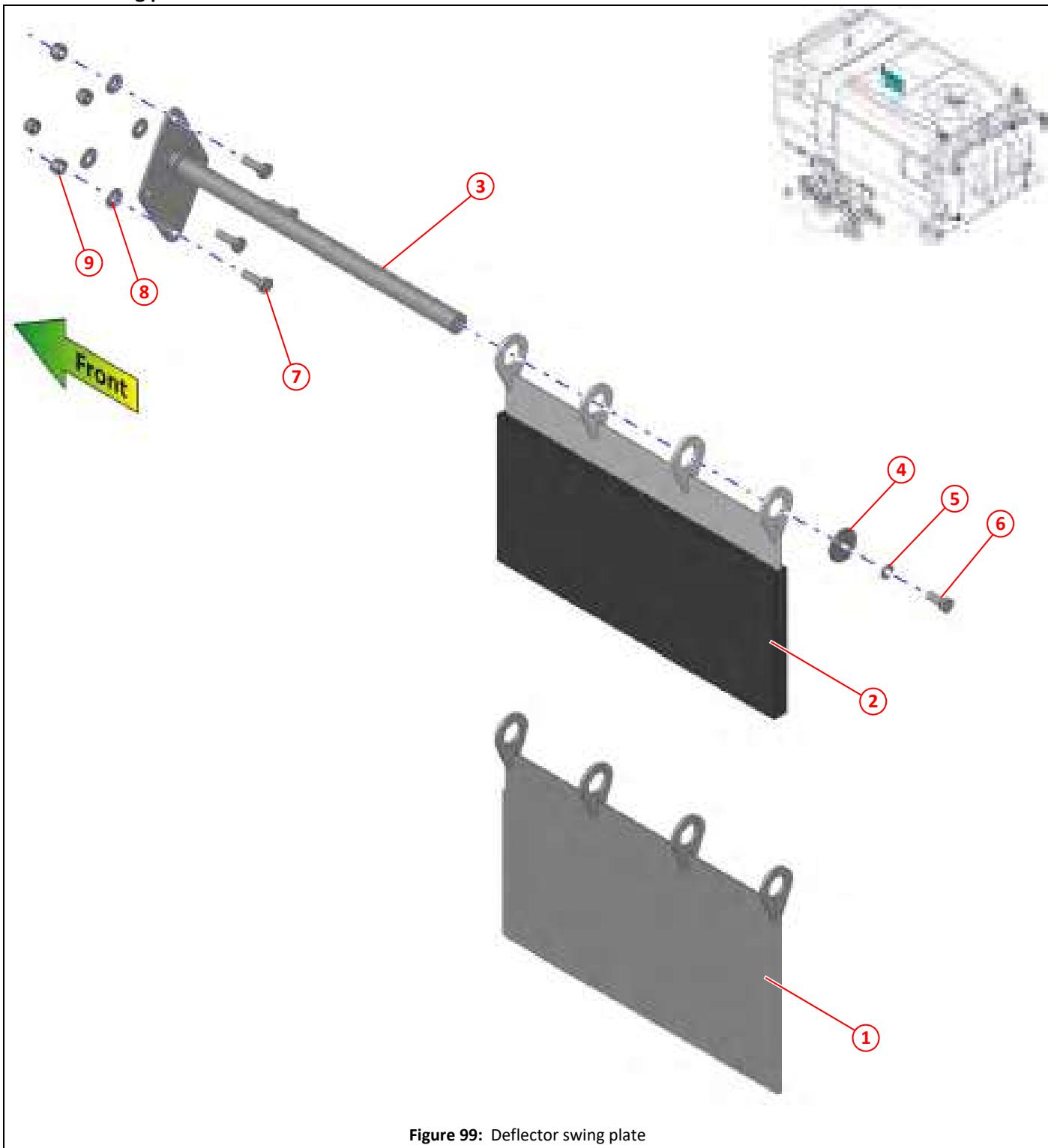


Figure 99: Deflector swing plate

| Item | Part No | Qty | Description                   |
|------|---------|-----|-------------------------------|
| ①    | 044618  | 1   | Deflector plate               |
| ②    | 044606  | 1   | Deflector plate, PU lined     |
| ③    | 044605  | 1   | Mounting bar, deflector plate |
| ④    | 030537  | 1   | Washer ø10.5 x ø40 x 5        |
| ⑤    | 011095  | 1   | Spring washer M10             |
| ⑥    | 011031  | 1   | Setscrew M10 x 25             |
| ⑦    | 011032  | 4   | Setscrew M10 x 30             |
| ⑧    | 011094  | 4   | Washer M10                    |
| ⑨    | 011075  | 4   | Nyloc nut T M10               |

## Standard wander hose arrangement

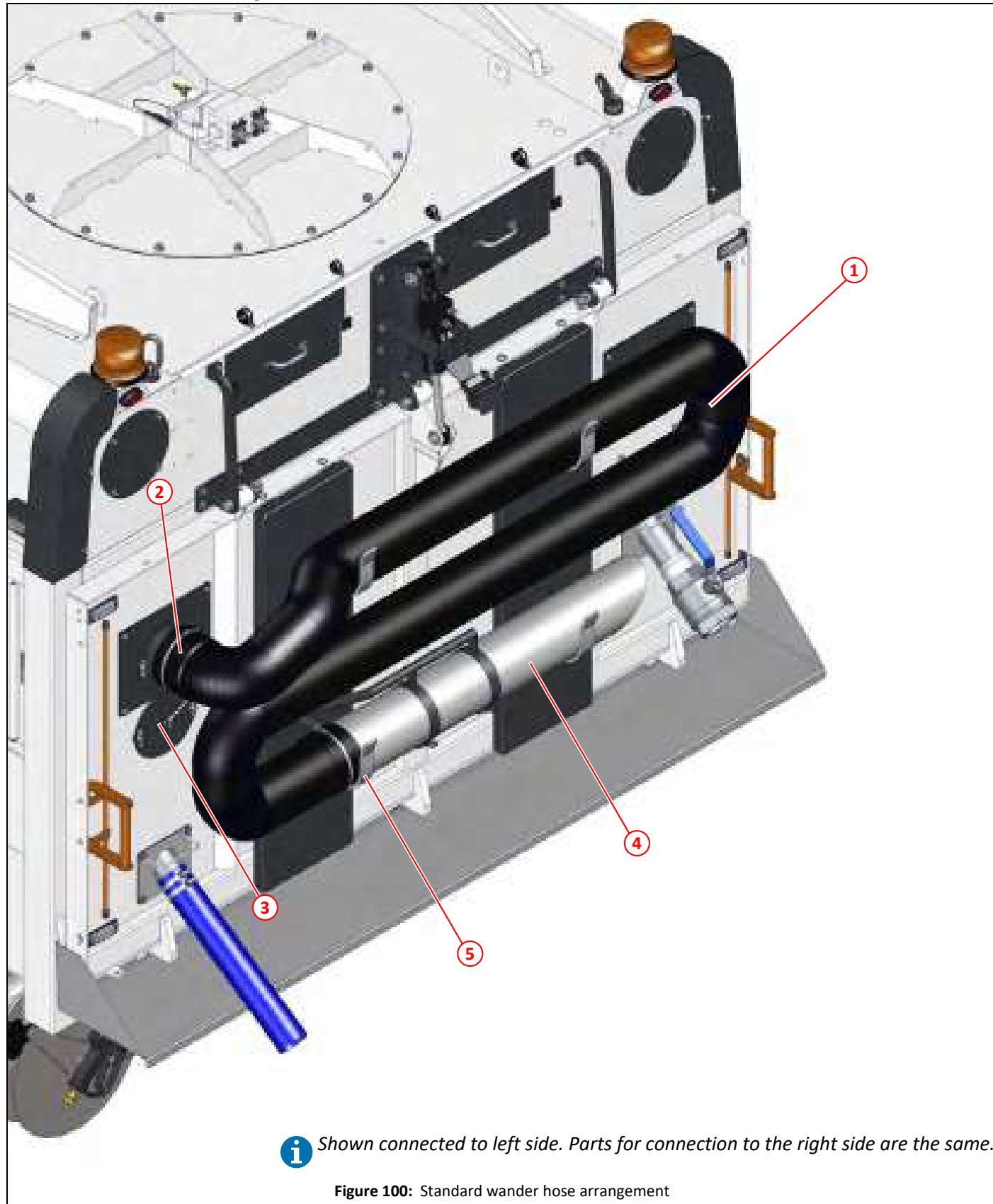


Figure 100: Standard wander hose arrangement

| Item | Part No | Qty | Description                |  |
|------|---------|-----|----------------------------|--|
| ①    | 010119  | 1   | Hose, wander, 3m, flexible |  |
| ②    | 012488  | 1   | Wander hose spigot         |  |
| ③    | 012486  | 1   | Blanking cap plate         |  |
| ④    | 010587  | 1   | Suction tube, wander hose  |  |
| ⑤    | 010245  | 4   | Hose hook, wander hose     |  |

## Standard wander hose

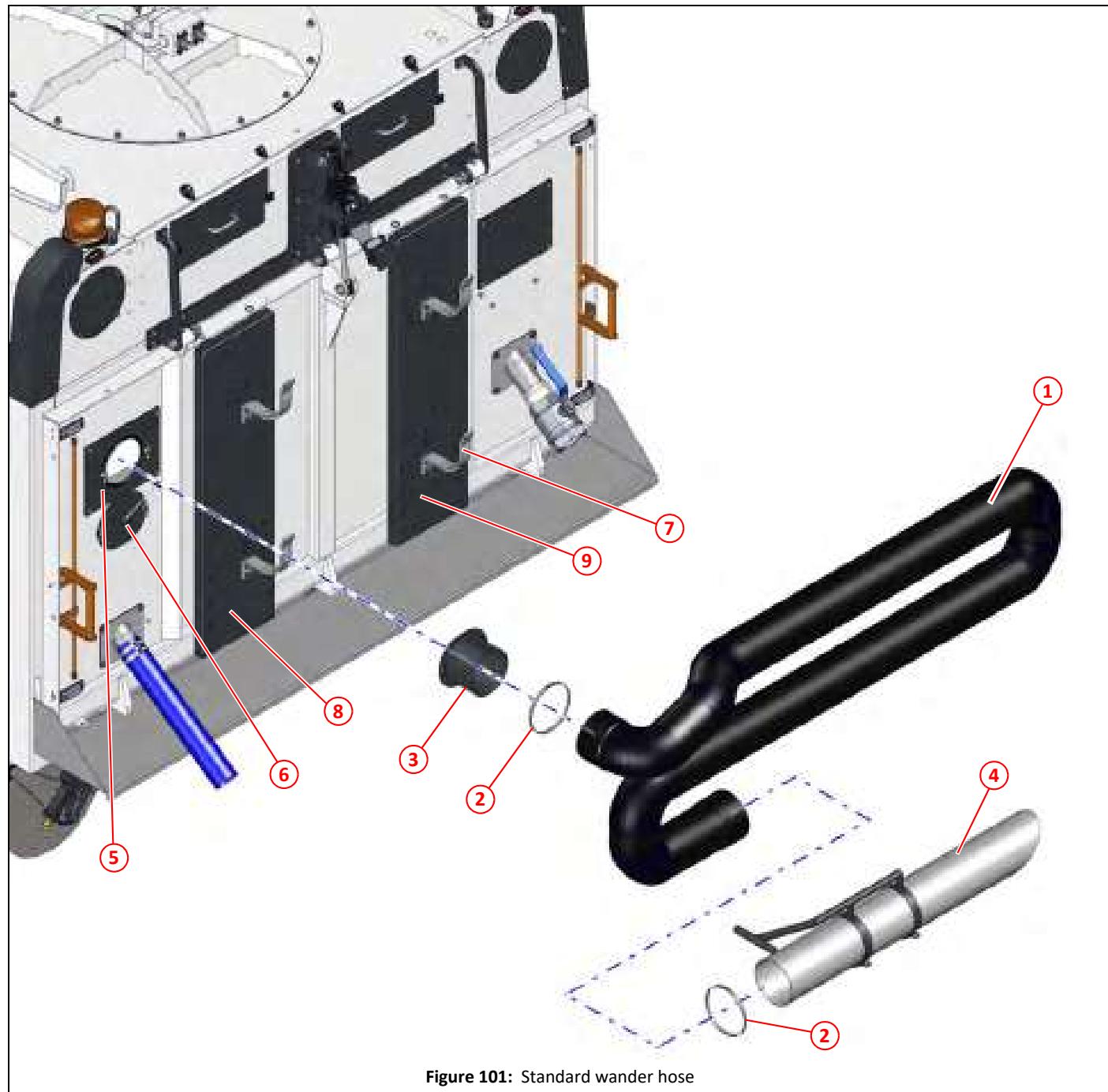
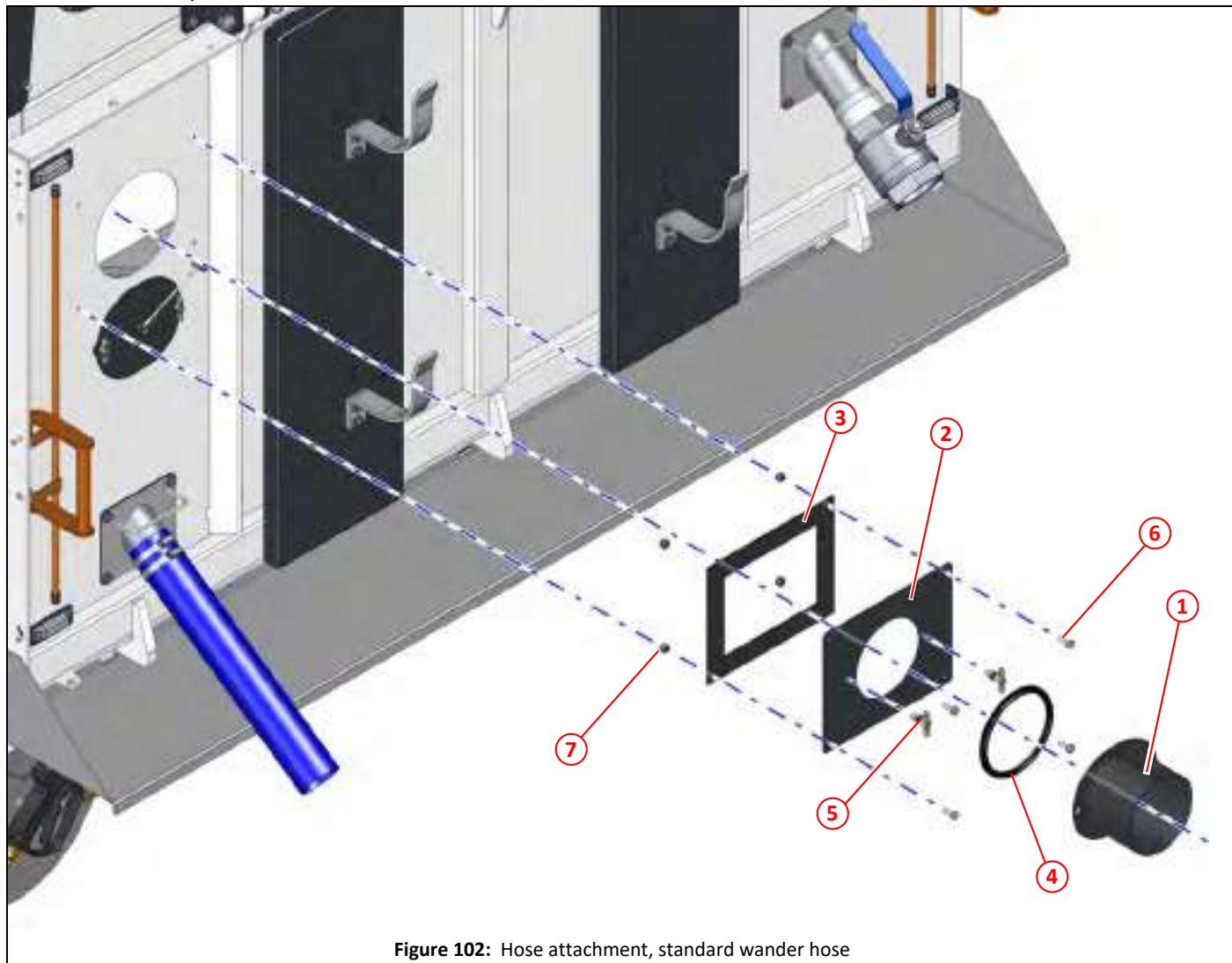


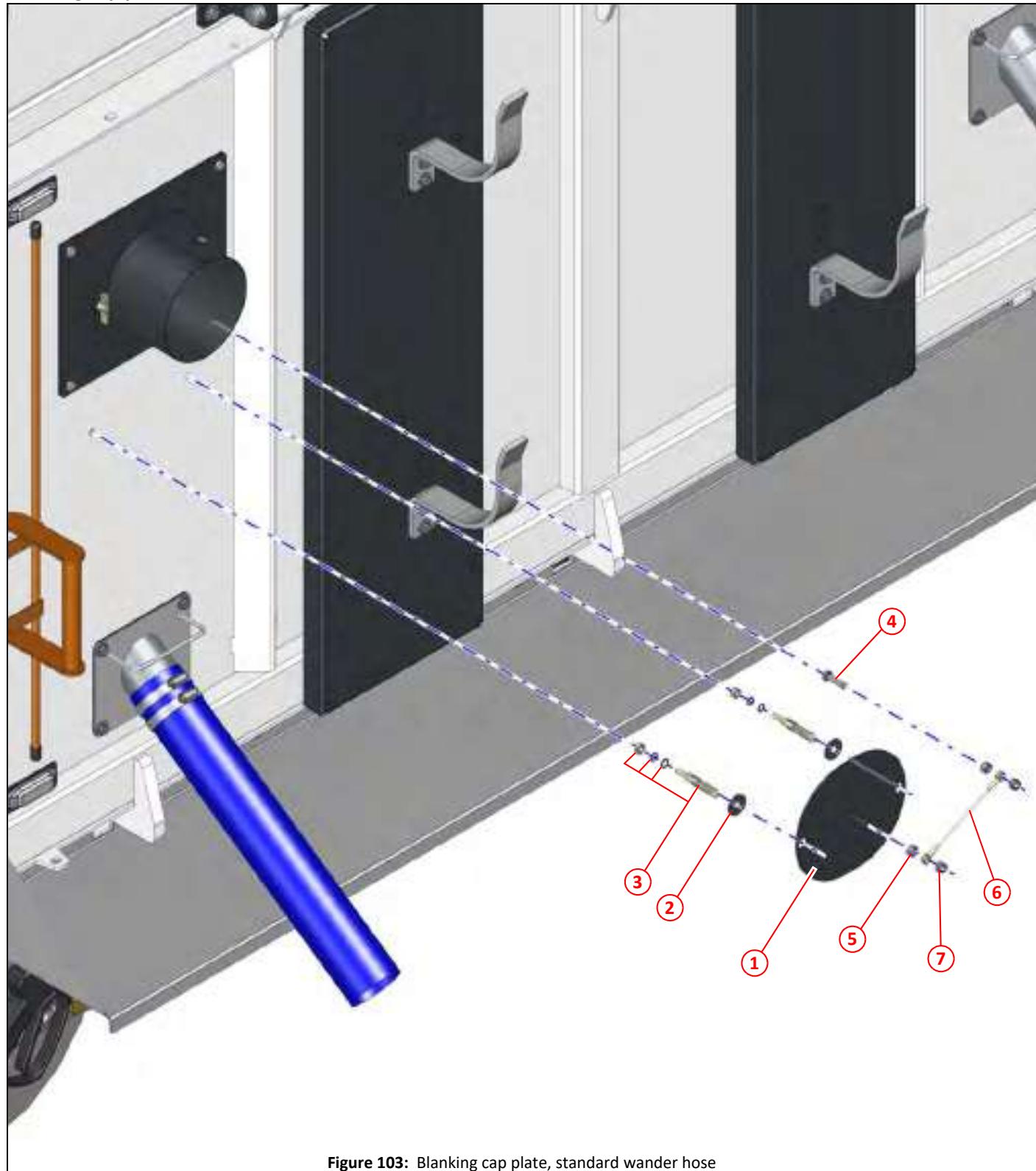
Figure 101: Standard wander hose

| Item | Part No | Qty | Description   |  |
|------|---------|-----|---|--|
| ①    | 010119  | 1   | Hose, wander, 3m, flexible                                      |  |
| ②    | 010519  | 2   | Jubilee clip, No 7 ( $\varnothing 135\text{-}\varnothing 165$ ) |  |
| ③    | 012488  | 1   | Wander hose spigot  |  |
| ④    | 010587  | 1   | Suction tube, wander hose                                       |  |
| ⑤    | 023009  | 1   | Mounting adapter, wander hose                                   |  |
| ⑥    | 012486  | 1   | Blanking cap plate  |  |
| ⑦    | 010245  | 4   | Hose hook, wander hose  |  |
| ⑧    | 046982  | 1   | Options bracket, left hand, rear door                           |  |
| ⑨    | 046983  | 1   | Options bracket, right hand, rear door                          |  |

## Hose attachment, standard wander hose

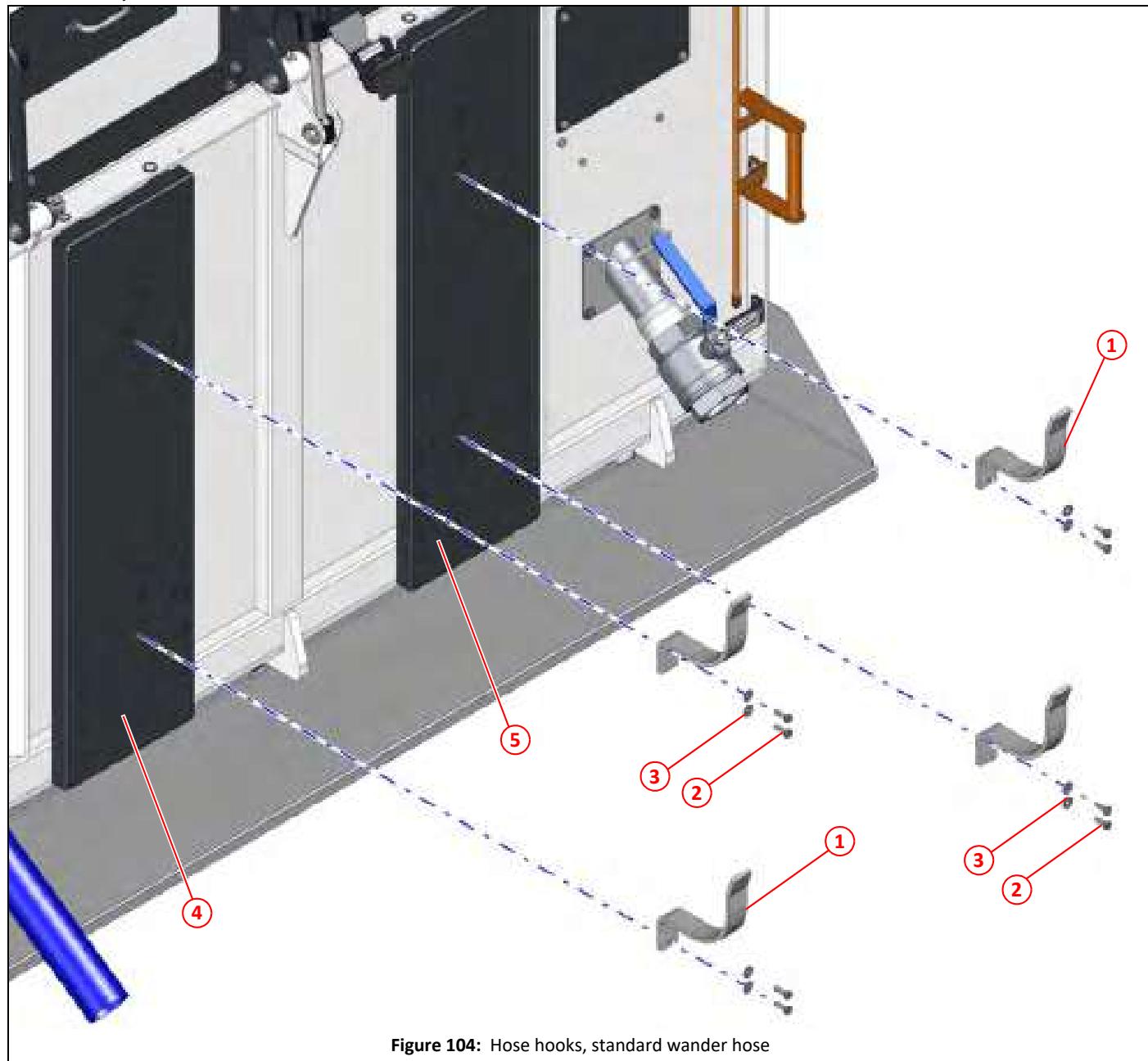


| Item | Part No | Qty | Description                                     |
|------|---------|-----|---|
| ①    | 012488  | 1   | Wander hose spigot                              |
| ②    | 023009  | 1   | Mounting adapter, wander hose                   |
| ③    | 010546  | 1   | Inseal strip, cut length as required            |
| ④    | 025222  | 1   | Titanfast, section DX78, cut length as required |
| ⑤    | 012253  | 2   | Antiluce, small                                 |
| ⑥    | 000256  | 4   | Setscrew M8 x 20, stainless steel               |
| ⑦    | 000263  | 4   | Nyloc nut T M8, stainless steel                 |

**Blanking cap plate, standard wander hose**

**Figure 103:** Blanking cap plate, standard wander hose

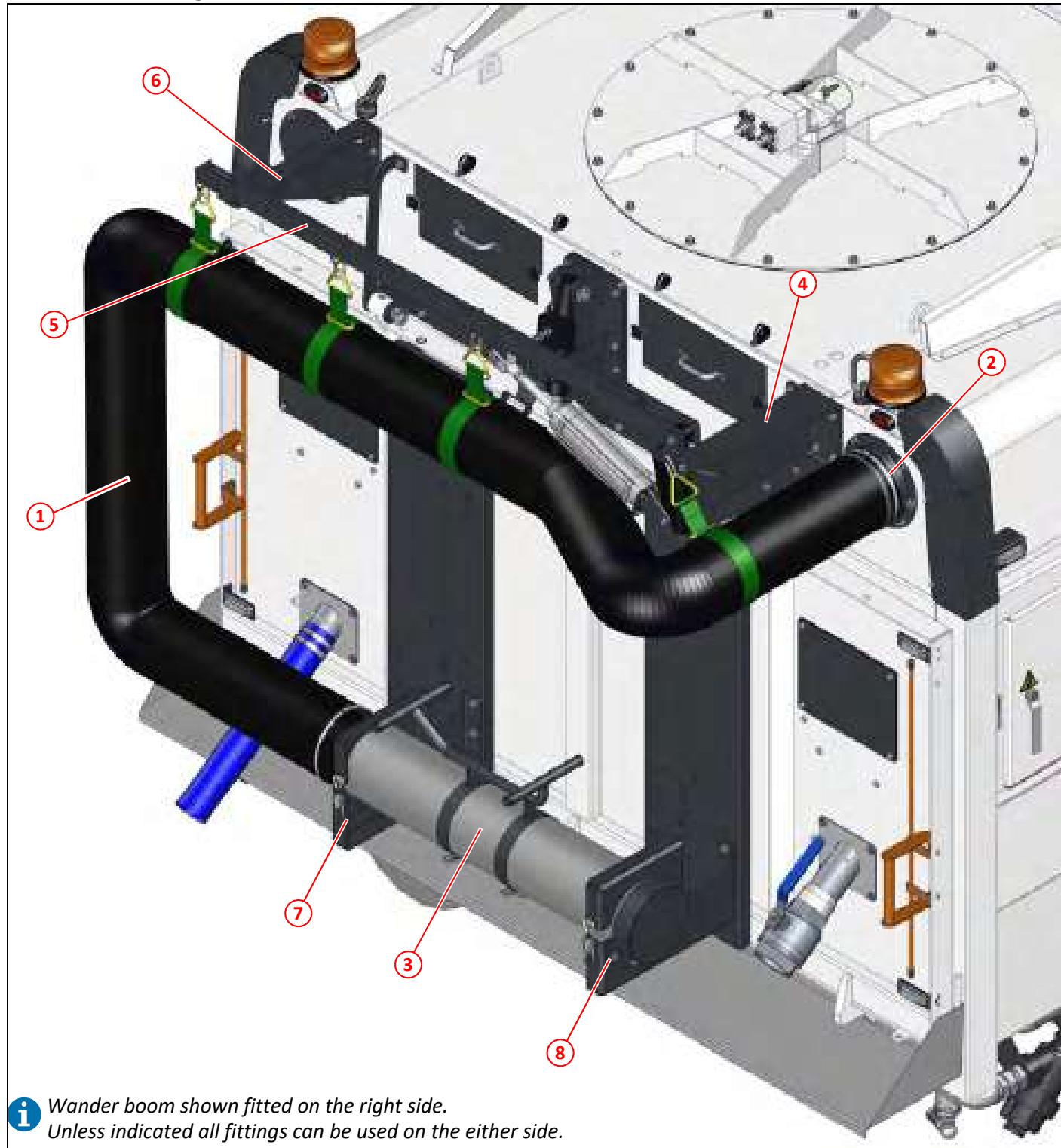
| Item | Part No | Qty | Description   |  |
|------|---------|-----|---|--|
| ①    | 012486  | 1   | Blanking cap plate                                      |  |
| ②    | 021979  | 2   | Rubber sealing washer $\phi 30 \times \phi 12 \times 3$ |  |
| ③    | 012253  | 2   | Antiluce, small   |  |
| ④    | 000258  | 1   | Setscrew M8 x 30, stainless steel                       |  |
| ⑤    | 000262  | 2   | Full nut M8, stainless steel                            |  |
| ⑥    | 020711  | 1   | Cable leash   |  |
| ⑦    | 000263  | 2   | Nyloc nut T M8, stainless steel                         |  |

## Hose hooks, standard wander hose



| Item | Part No | Qty | Description                            |
|------|---------|-----|--|
| ①    | 010245  | 4   | Hose hook, wander hose                 |
| ②    | 000257  | 8   | Setscrew m8 x 25, stainless steel      |
| ③    | 000264  | 8   | Washer M8, stainless steel             |
| ④    | 046982  | 1   | Options bracket, left hand, rear door  |
| ⑤    | 046983  | 1   | Options bracket, right hand, rear door |

## Wander boom arrangement

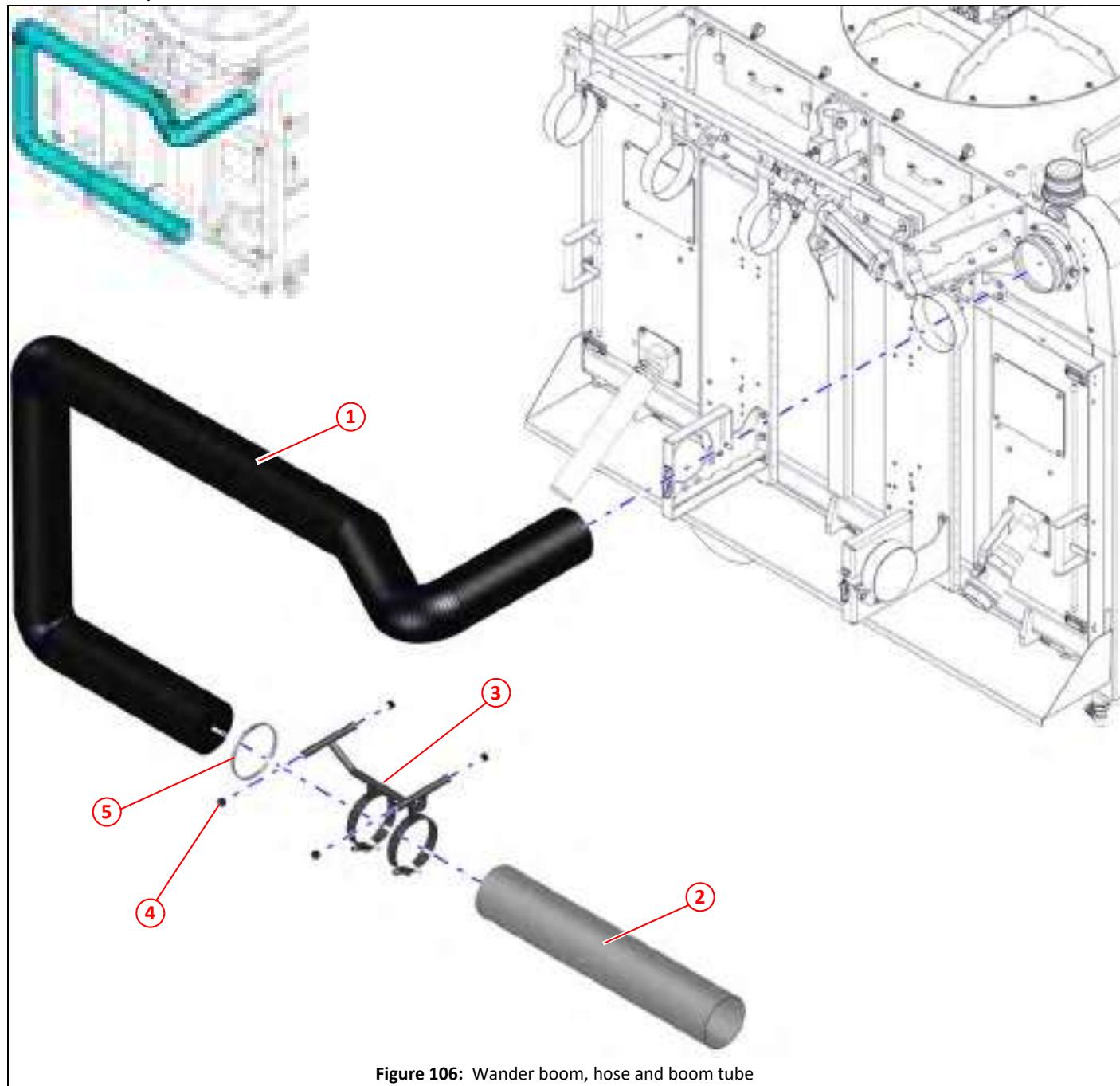


**i** Wander boom shown fitted on the right side.  
Unless indicated all fittings can be used on the either side.

Figure 105: Wander boom arrangement

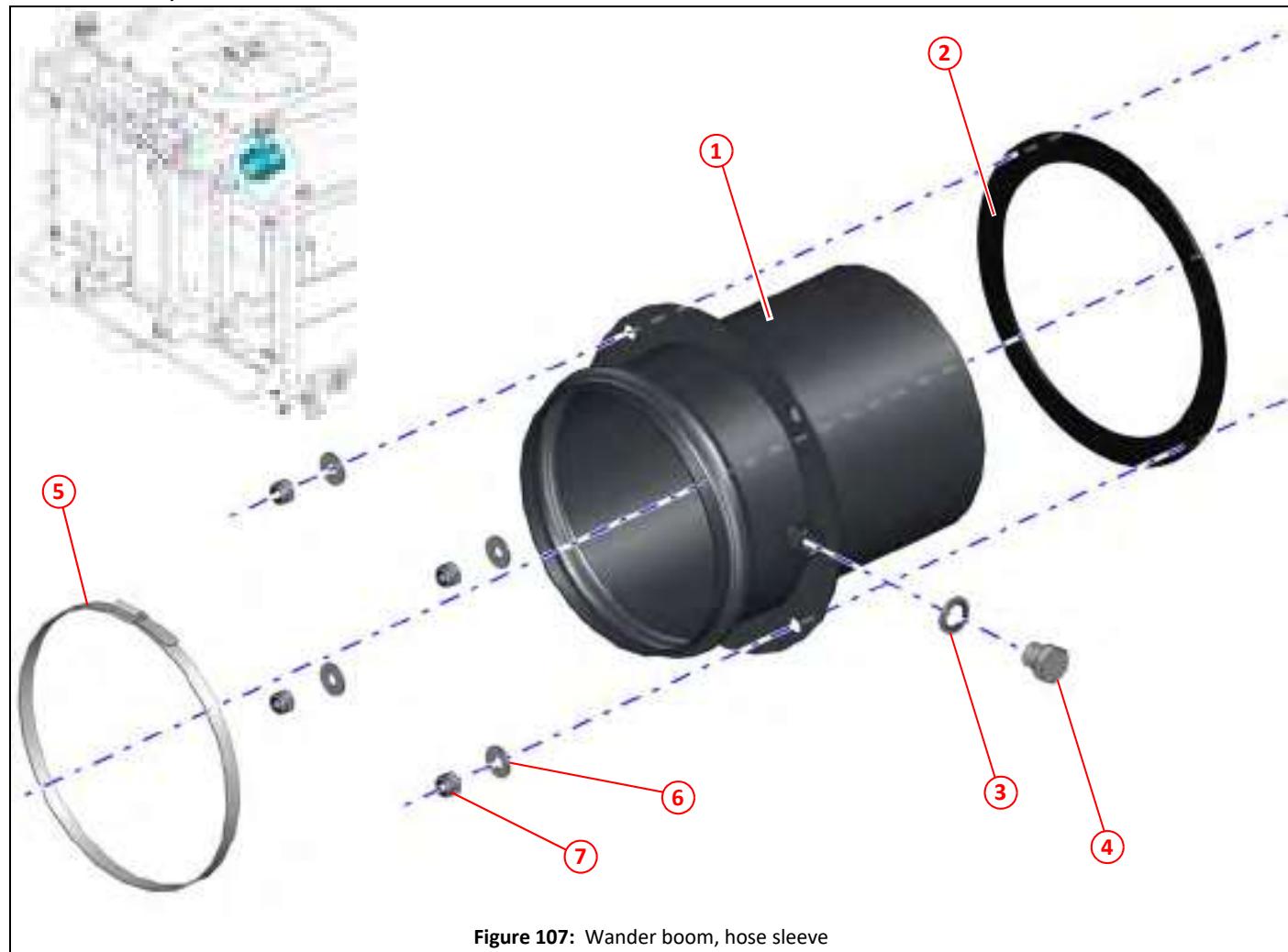
| Item | Part No | Qty | Description                       |  |
|------|---------|-----|-----------------------------------|--|
| ①    | 025214  | 1   | Wander hose, ø180 4.5m            |  |
| ②    | 025225  | 1   | Wander hose sleeve ø180           |  |
| ③    | 035959  | 1   | Boom tube ø180                    |  |
| ④    | 047004  | 1   | Boom hinge                        |  |
| ⑤    | 027926  | 1   | Hose support boom                 |  |
| ⑥    |         | 1   | Stowage bracket                   |  |
| ⑦    | 047071  |     | Boom stowage cup ø180, left hand  |  |
| ⑧    | 047070  | 1   | Boom stowage cup ø180, right hand |  |

## Wander boom, hose and boom tube



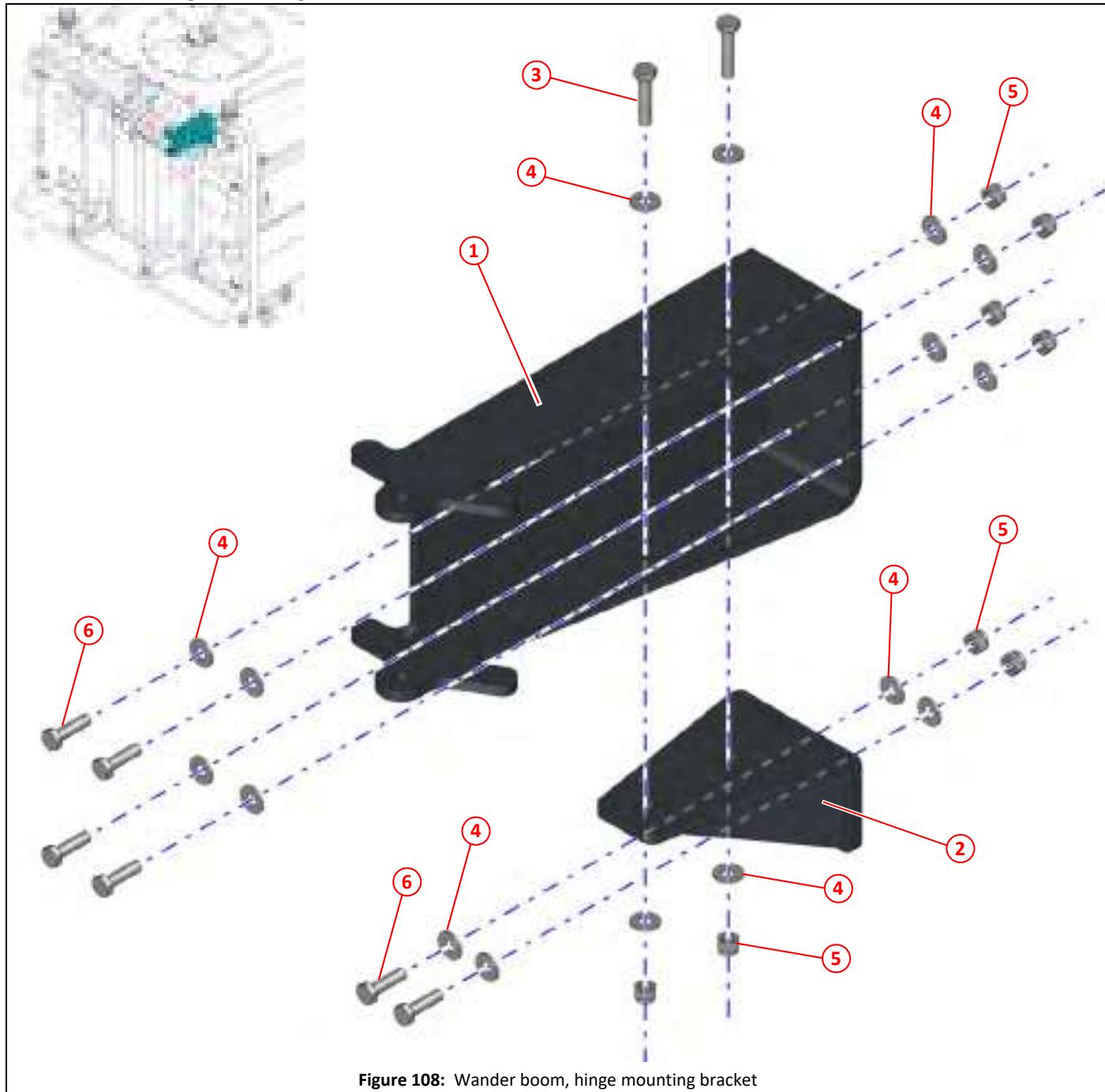
| Item | Part No | Qty | Description                          |
|------|---------|-----|--------------------------------------|
| ①    | 025214  | 1   | Wander hose, ø180 4.5m               |
| ②    | 035959  | 1   | Boom tube ø180                       |
| ③    | 039283  | 1   | Boom handle ø180                     |
| ④    | 026173  | 1   | Plastic plug ø25.4 (black)           |
| ⑤    | 012933  | 1   | Jubilee clip, No 10.50 (ø235 - ø267) |

## Wander boom, hose sleeve



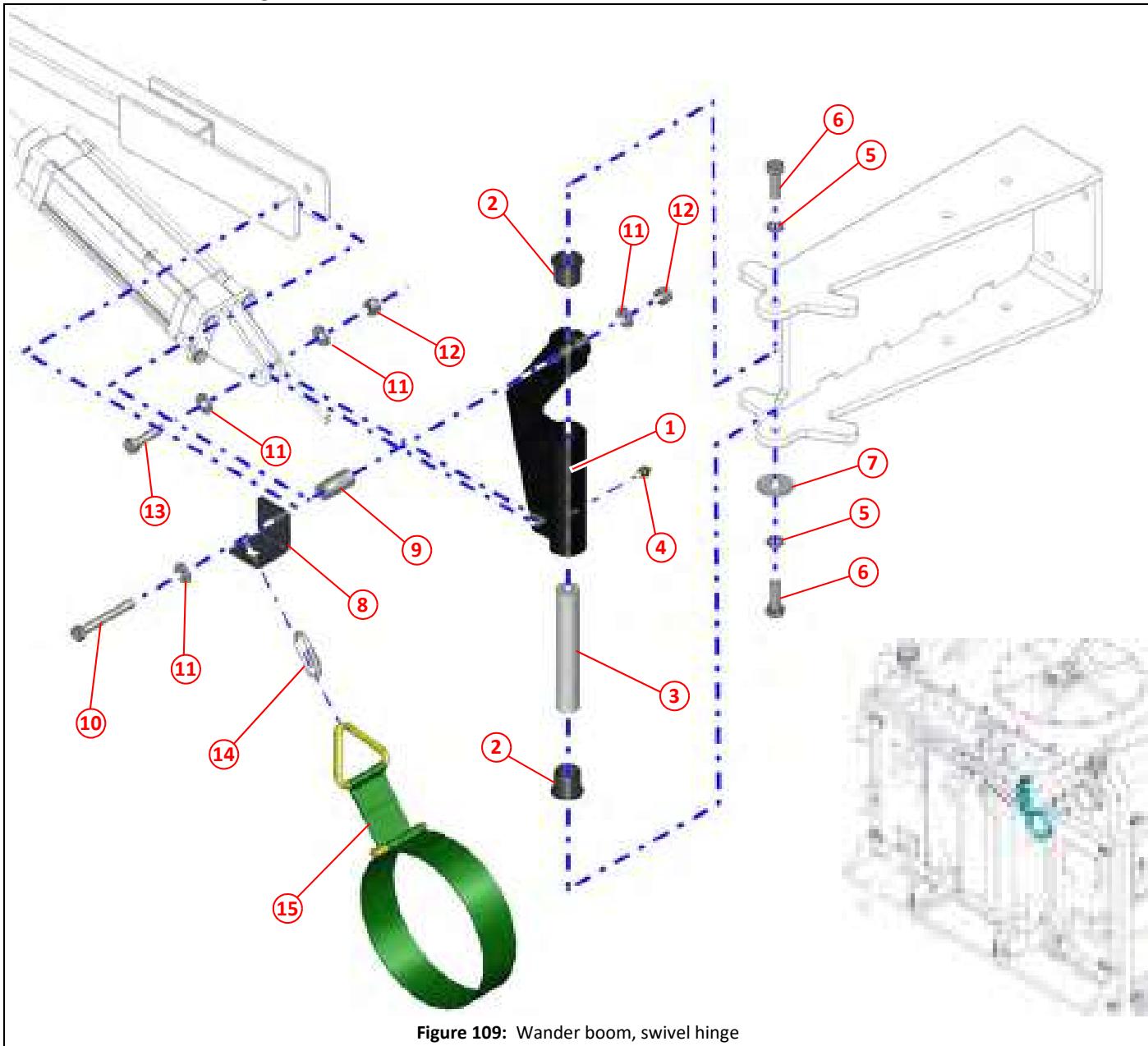
| Item | Part No | Qty | Description                                 |
|------|---------|-----|---|
| ①    | 025225  | 1   | Wander hose sleeve ø180                     |
| ②    | 013645  | 1   | Inseal strip 3 x 19, cut to required length |
| ③    | 011153  | 1   | Dowty seal $\frac{3}{8}$ " BSP              |
| ④    | 011242  | 1   | Plug $\frac{3}{8}$ " BSP                    |
| ⑤    | 012933  | 1   | Jubilee clip, No 10.50 (ø235 - ø267)        |
| ⑥    | 000264  | 4   | Washer M8, stainless steel                  |
| ⑦    | 000263  | 4   | Nyloc nut T M8, stainless steel             |

## Wander boom, hinge mounting bracket



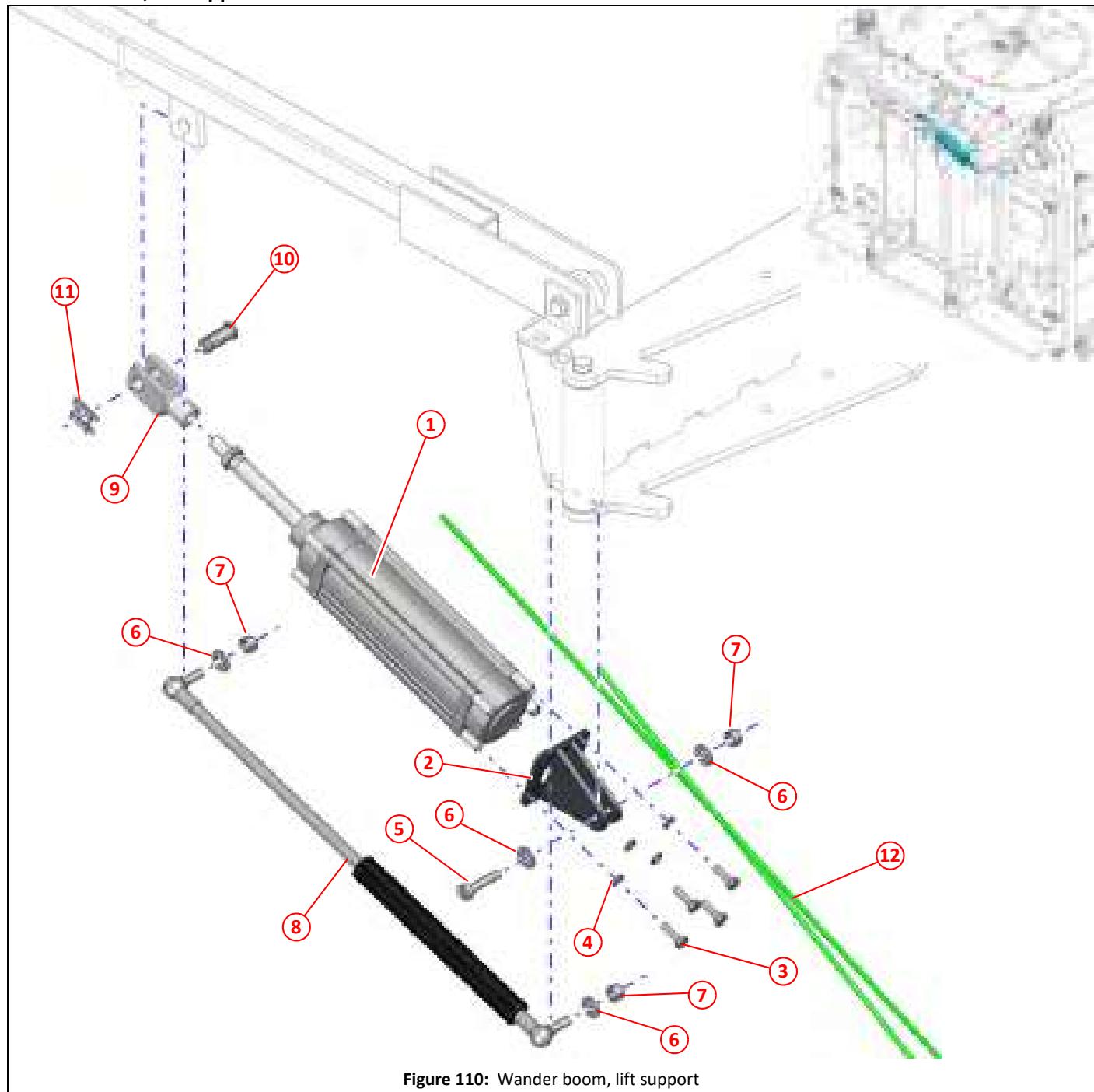
| Item | Part No | Qty | Description        |  |
|------|---------|-----|--------------------|--|
| ①    | 047004  | 1   | Boom hinge         |  |
| ②    | 047036  | 1   | Boom hinge support |  |
| ③    | 000072  | 2   | Setscrew M10 x45   |  |
| ④    | 011094  | 16  | Washer M10         |  |
| ⑤    | 011075  | 8   | Nyloc nut T M10    |  |
| ⑥    | 011033  | 6   | Setscrew M10 x 35  |  |

## Wander boom, swivel hinge



| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 025219  | 1   | Wander boom hose hinge                                    |
| ②    | 013662  | 2   | Bush  |
| ③    | 023490  | 1   | Hinge shaft, boom   |
| ④    | 010903  | 1   | Grease nipple $\frac{1}{8}$ " BSP, straight               |
| ⑤    | 011097  | 2   | Spring washer M12   |
| ⑥    | 011053  | 2   | Setscrew M12 x 35   |
| ⑦    | 013448  | 1   | Washer $\varnothing 40 \times \varnothing 13 \times 2$    |
| ⑧    | 012548  | 1   | Angle bracket   |
| ⑨    | 014399  | 1   | Spacer $\varnothing 20 \times \varnothing 10.5 \times 41$ |
| ⑩    | 011038  | 1   | Bolt M10 x 80   |
| ⑪    | 011094  | 4   | Washer M10  |
| ⑫    | 011075  | 2   | Nyloc nut M10   |
| ⑬    | 000072  | 1   | Setscrew M10 x45  |
| ⑭    | 010606  | 4   | Carabiner   |
| ⑮    | 025235  | 4   | Wander hose strap   |

## Wander boom, lift support



| Item | Part No | Qty | Description                                    |
|------|---------|-----|--|
| ①    | 028306  | 1   | Pneumatic cylinder ø63 X 160                   |
| ②    | 028305  | 1   | Air ram pivot bracket                          |
| ③    | 011011  | 4   | Setscrew M8 x 25                               |
| ④    | 011093  | 4   | Spring washer M8                               |
| ⑤    | 000072  | 1   | Setscrew M10 x 45                              |
| ⑥    | 011094  | 4   | Washer M10                                     |
| ⑦    | 011075  | 3   | Nyloc nut T M10                                |
| ⑧    | 021993  | 1   | Gas strut                                      |
| ⑨    | 020299  | 1   | Clevis pneumatic M16 x 1.5                     |
| ⑩    | 022673  | 1   | Clevis pin (turned)                            |
| ⑪    | 022674  | 1   | Retaining clip M16                             |
| ⑫    | 024650  | 2   | ø6mm green air pipe, cut to length as required |

## Wander boom, hose support

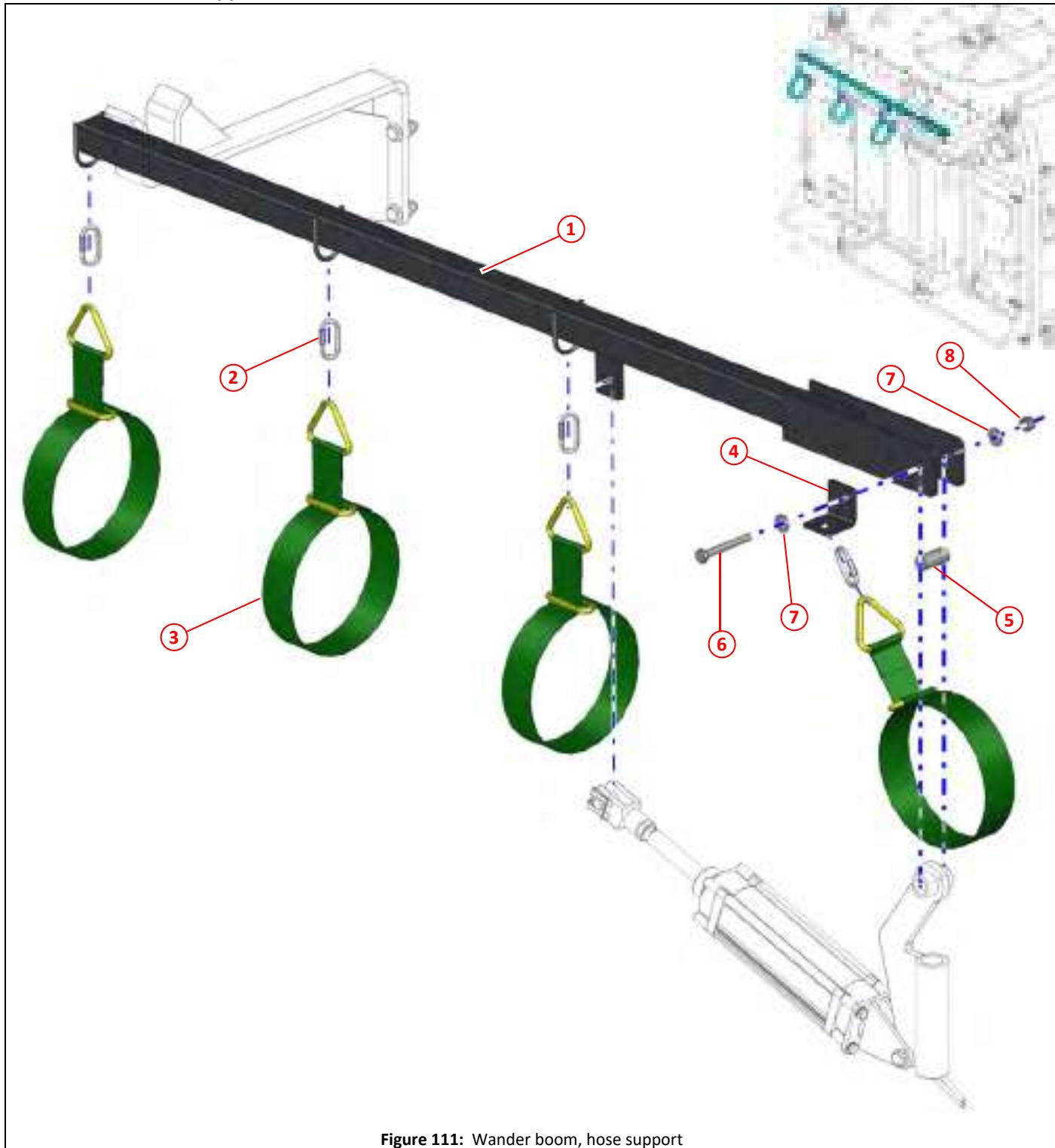
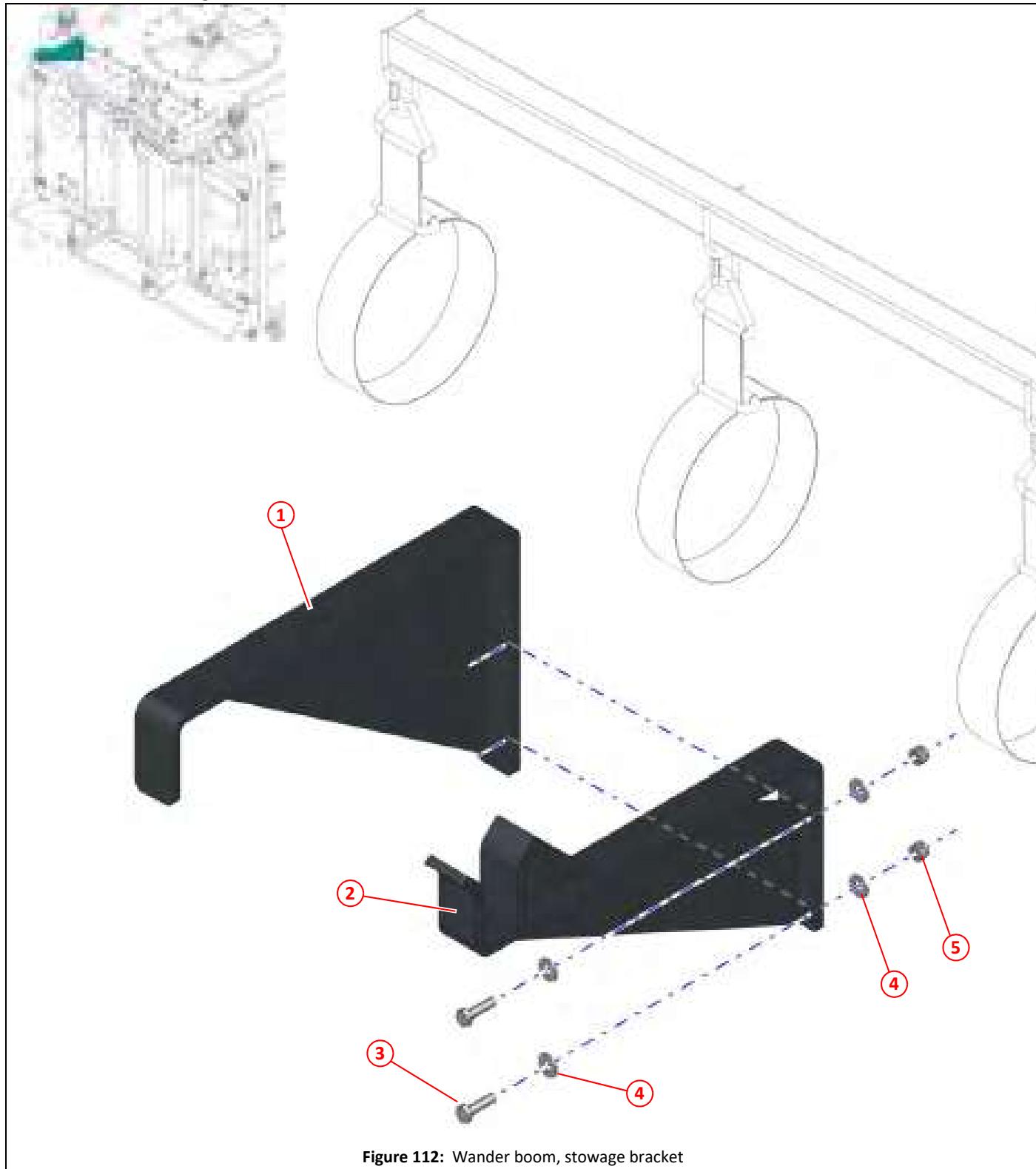


Figure 111: Wander boom, hose support

| Item | Part No | Qty | Description             |  |
|------|---------|-----|-------------------------|--|
| ①    | 027926  | 1   | Hose support boom       |  |
| ②    | 010606  | 4   | Carabiner               |  |
| ③    | 025235  | 4   | Wander hose strap       |  |
| ④    | 012548  | 1   | Angle bracket           |  |
| ⑤    | 014399  | 1   | Spacer ø20 x ø10.5 x 41 |  |
| ⑥    | 011038  | 1   | Bolt M10 x 80           |  |
| ⑦    | 011094  | 2   | Washer M10              |  |
| ⑧    | 011075  | 1   | Nyloc nut M10           |  |

## Wander boom, stowage bracket



| Item | Part No | Qty | Description                                  |
|------|---------|-----|--|
| ①    | 034313  | 1   | Boom stowage bracket, gas strut version      |
| ②    | 048225  | 1   | Boom stowage bracket, pneumatic lift version |
| ③    | 011033  | 2   | Setscrew M10 x 35                            |
| ④    | 011094  | 4   | Washer M10                                   |
| ⑤    | 011075  | 2   | Nyloc nut T M10                              |

## Wander boom, tube blanking stowage

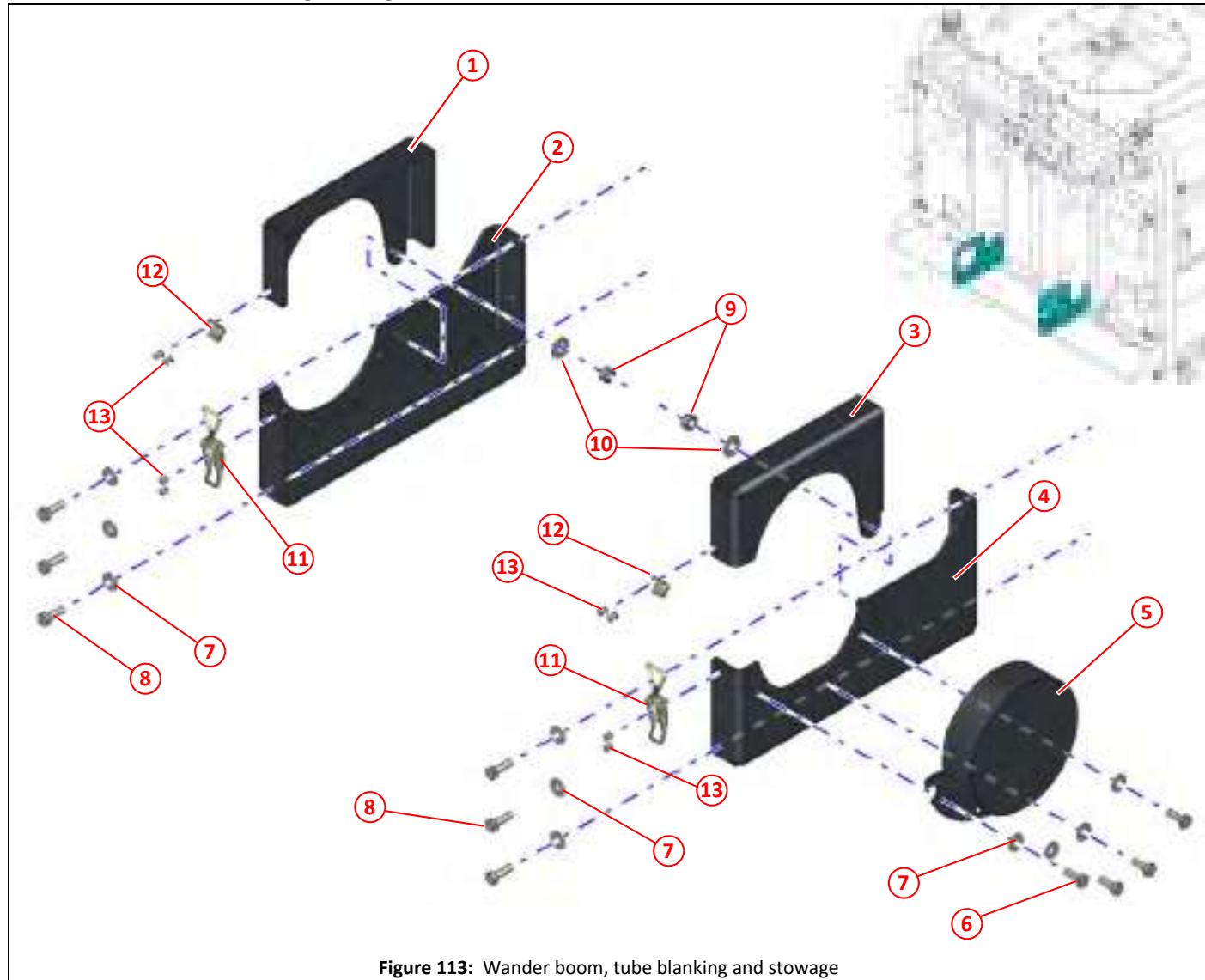
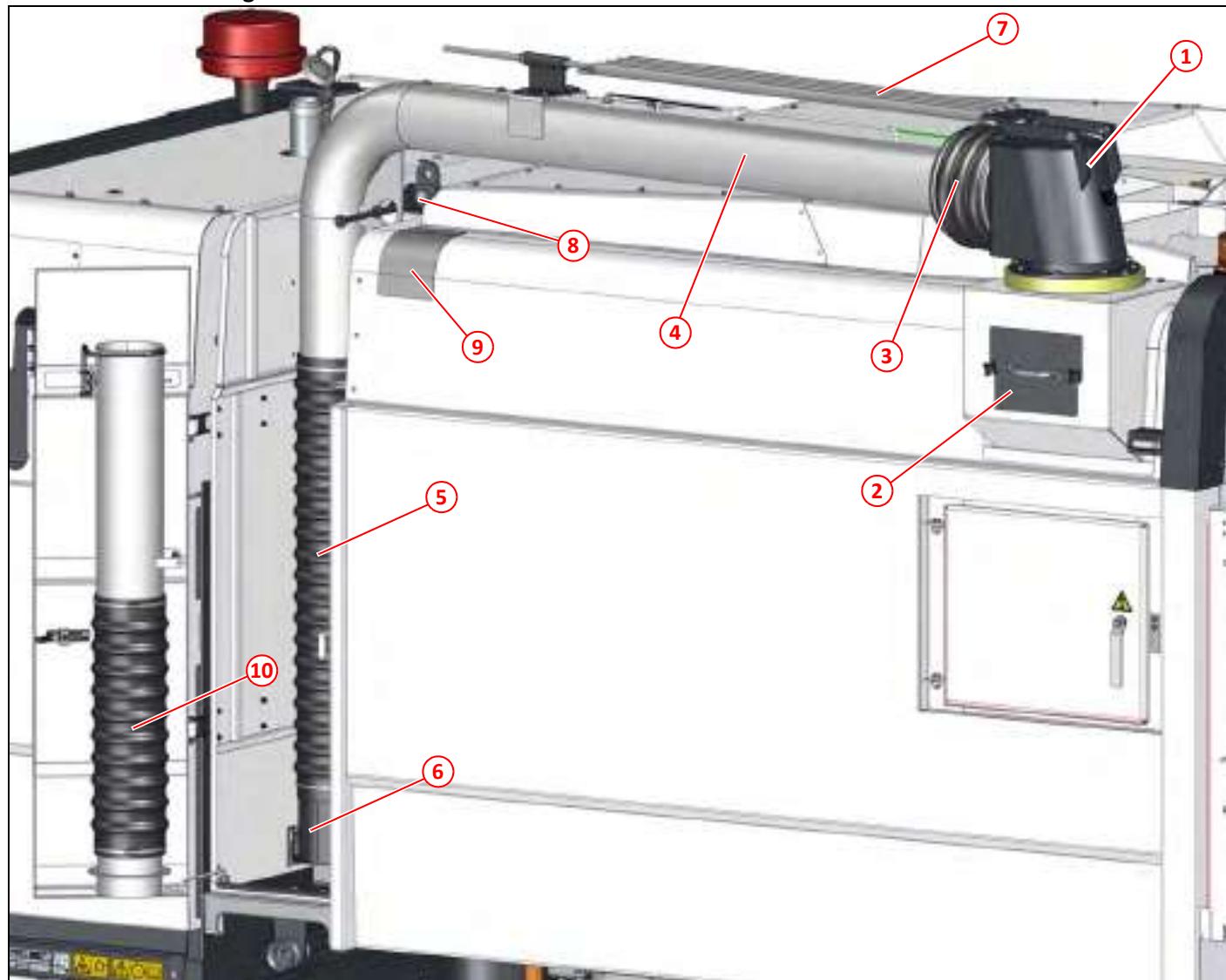


Figure 113: Wander boom, tube blanking and stowage

| Item | Part No | Qty | Description                           |
|------|---------|-----|---------------------------------------|
| ①    | 035962  | 1   | Boom mounting lock, left hand side    |
| ②    | 047071  | 1   | Boom stowage cup ø180, left hand side |
| ③    | 039282  | 1   | Boom mounting lock, right hand side   |
| ④    | 047070  | 1   | Boom stowage cup ø180, right hand     |
| ⑤    | 047069  | 1   | Boom stowage blanking cup ø180        |
| ⑥    | 011031  | 4   | Setscrew M10 x 25                     |
| ⑦    | 011094  | 10  | Washer M10                            |
| ⑧    | 011032  | 6   | Setscrew M10 x30                      |
| ⑨    | 011077  | 2   | Nyloc nut T M12                       |
| ⑩    | 011096  | 2   | Washer M12                            |
| ⑪    | 010509  | 2   | Ojop fastener with hinged toggle      |
| ⑫    | 021841  | 2   | Toggle clip hook                      |
| ⑬    | 011131  | 8   | Seal blind rivet ø4.8 x 18            |

## Overhead boom arrangement



**i** Overhead boom shown fitted on the left side. Unless indicated all fittings can be used on the either side.

Figure 114: Overhead boom arrangement

| Item | Part No | Qty | Description                             |
|------|---------|-----|---|
| ①    | 013793  | 1   | Boom elbow                              |
| ②    | 032351  | 1   | Access cover, overhead boom carrier     |
| ③    | 044107  | 1   | Cuff, boom pivot                        |
| ④    | 047077  | 1   | Suction pipe with elbow, overhead boom  |
| ⑤    | 047088  | 1   | Hose 1.025m, overhead boom              |
| ⑥    | 050988  | 1   | Hose coupling, overhead boom, complete  |
| ⑦    | 013805  | 4   | Tension springs                         |
| ⑧    | 044303  | 1   | Boom retainer                           |
| ⑨    | 044384  | 1   | Plate, hopper protection, overhead boom |
| ⑩    | 044139  | 1   | Overhead boom extension                 |

## Overhead boom, elbow and access cover

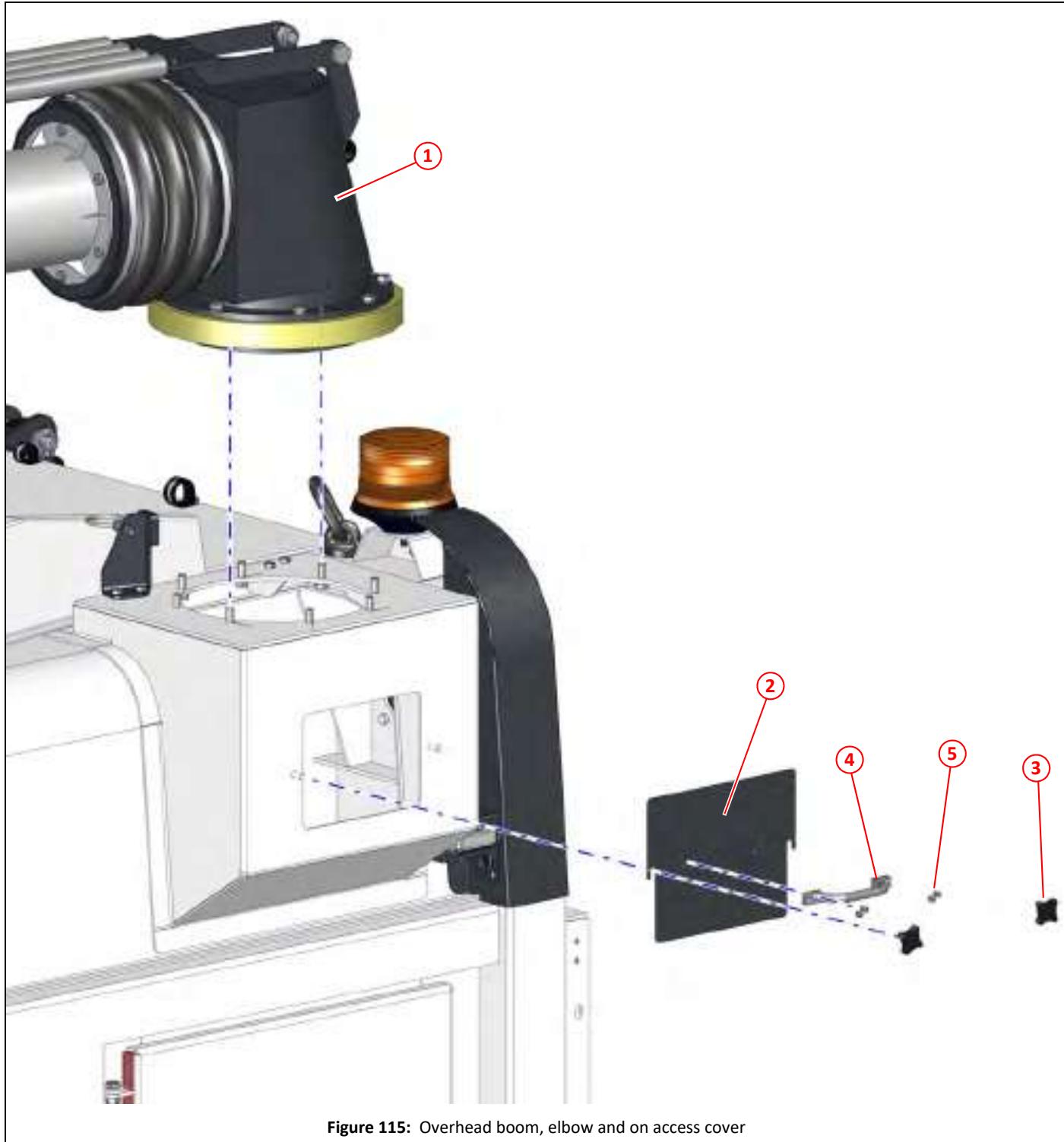


Figure 115: Overhead boom, elbow and on access cover

| Item | Part No | Qty | Description                             |
|------|---------|-----|---|
| ①    | 013793  | 1   | Boom elbow                              |
| ②    | 032351  | 1   | Access cover, overhead boom carrier     |
| ③    | 000248  | 2   | Grip nut M8, with brass insert          |
| ④    | 010502  | 1   | Pull handle                             |
| ⑤    | 011124  | 4   | Blind rivet $\varnothing 4.0 \times 10$ |

## Overhead boom, elbow and bearing

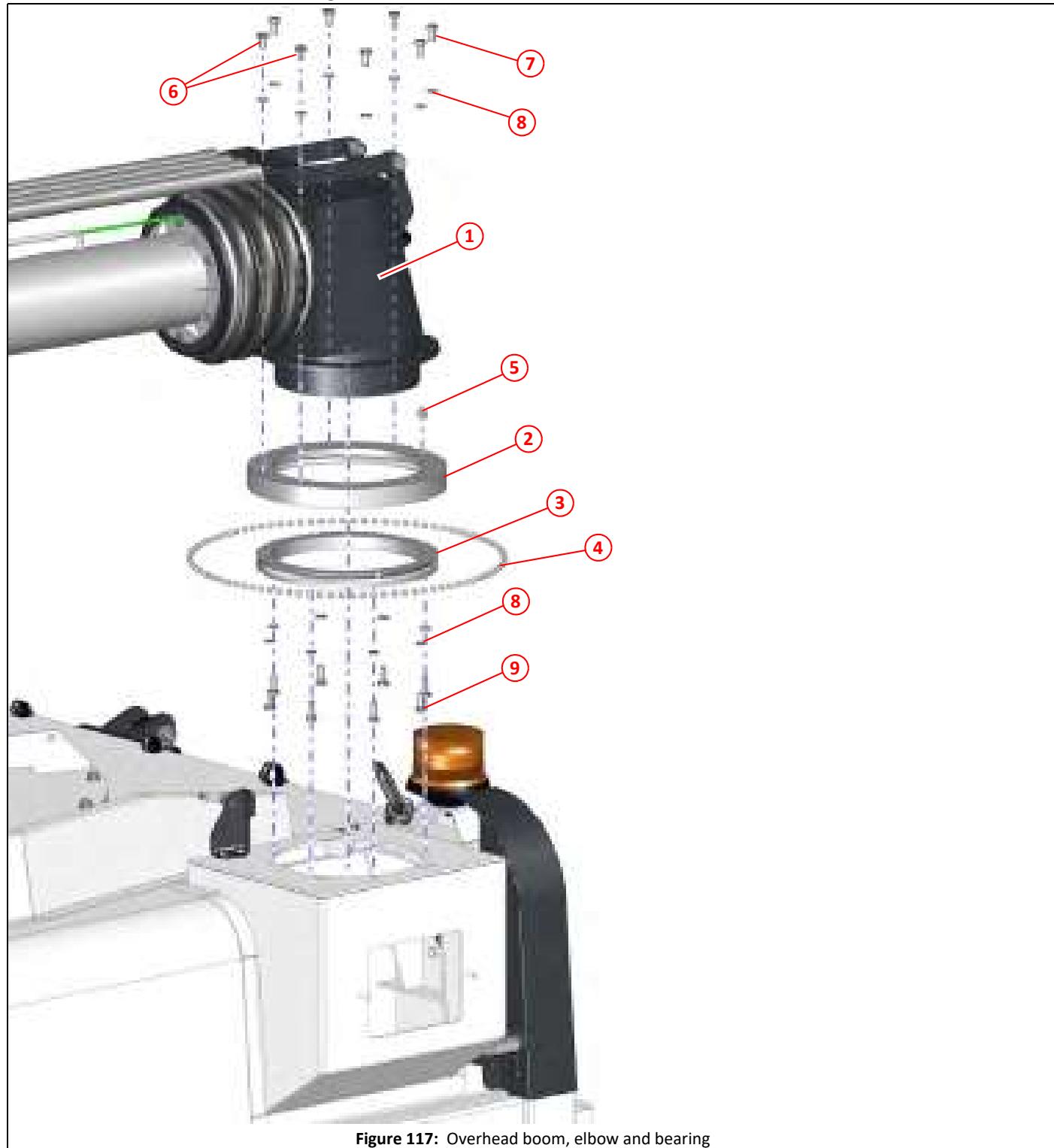


Figure 117: Overhead boom, elbow and bearing

| Item | Part No | Qty | Description                                 |
|------|---------|-----|---|
| ①    | 013793  | 1   | Boom elbow                                  |
| ②    | 013788  | 1   | Slew ring, outer                            |
| ③    | 013789  | 1   | Slew ring, inner                            |
| ④    | 013791  | 72  | Ball 10mm, steel, overhead boom             |
| ⑤    | 013792  | 1   | Grease nipple $\frac{1}{4}$ " BSP, straight |
| ⑥    | 000210  | 2   | Bolt M10 x 16                               |
| ⑦    | 011030  | 6   | Setscrew M10 x 20                           |
| ⑧    | 011095  | 16  | Spring washer M10                           |
| ⑨    | 011031  | 8   | Setscrew M10 x 25                           |

## Overhead boom, stop

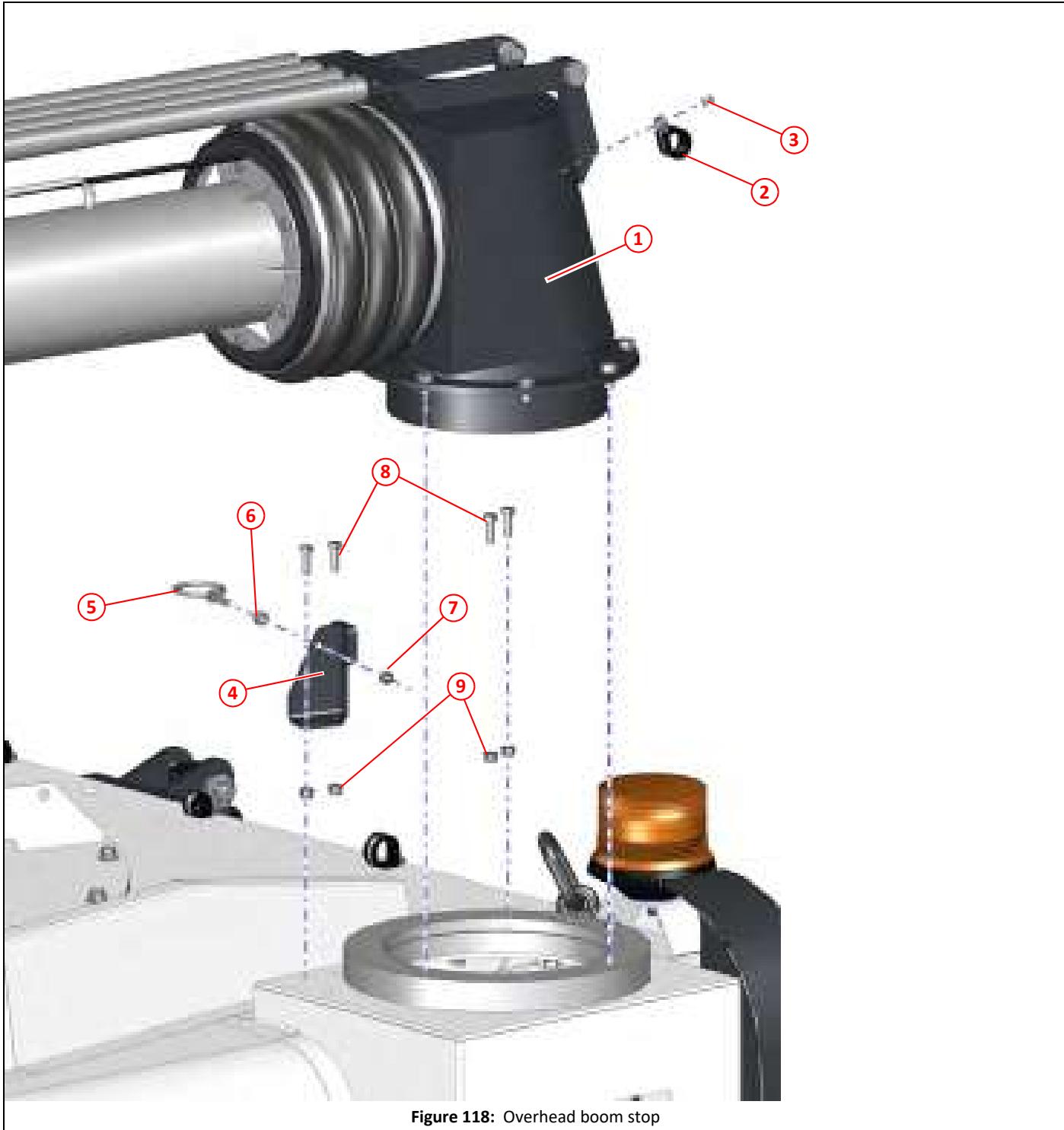


Figure 118: Overhead boom stop

| Item | Part No | Qty | Description                       |  |
|------|---------|-----|-----------------------------------|--|
| ①    | 013793  | 1   | Boom elbow                        |  |
| ②    | 003001  | 1   | Clip ø22, rubber insert           |  |
| ③    | 011131  | 1   | Seal blind rivet ø4.8 x 18        |  |
| ④    | 044143  | 1   | Bracket, boom stop                |  |
| ⑤    | 033022  | 1   | Hose ring                         |  |
| ⑥    | 000262  | 1   | Full nut M8, stainless steel      |  |
| ⑦    | 011073  | 1   | Nyloc nut T M8                    |  |
| ⑧    | 000257  | 4   | Setscrew M8 x 25, stainless steel |  |
| ⑨    | 000263  | 4   | Nyloc nut T M8, stainless steel   |  |

## Overhead boom, spring anchor

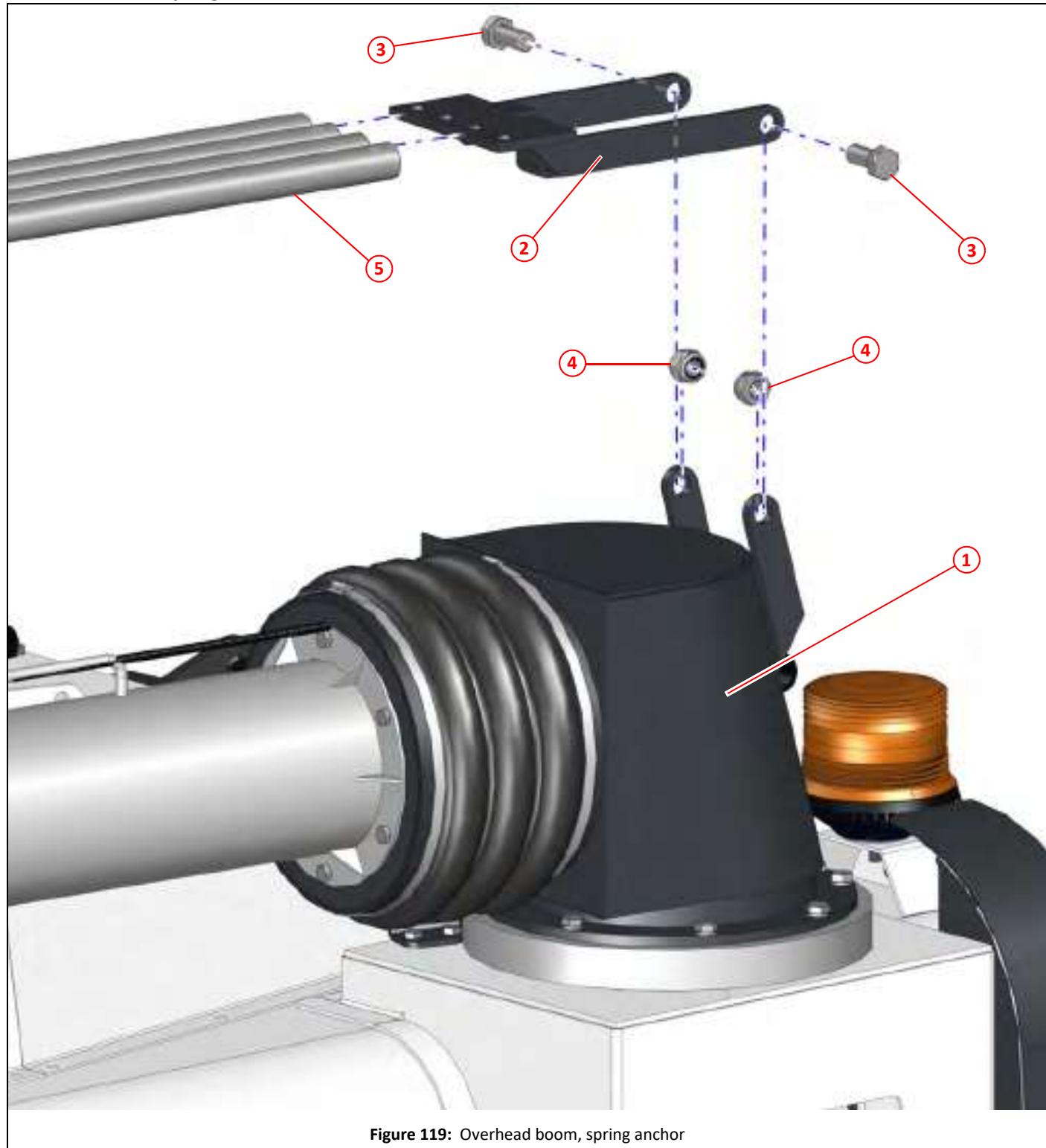


Figure 119: Overhead boom, spring anchor

| Item | Part No | Qty | Description       |   |
|------|---------|-----|-------------------|---|
| ①    | 013793  | 1   | Boom elbow        | ≡ |
| ②    | 013801  | 1   | Spring anchor     |   |
| ③    | 011141  | 2   | Bolt M16 x 35     |   |
| ④    | 011060  | 2   | Nyloc nut T M16   |   |
| ⑤    | 013805  | 4   | Spring 800mm long |   |

## Overhead boom, cuff

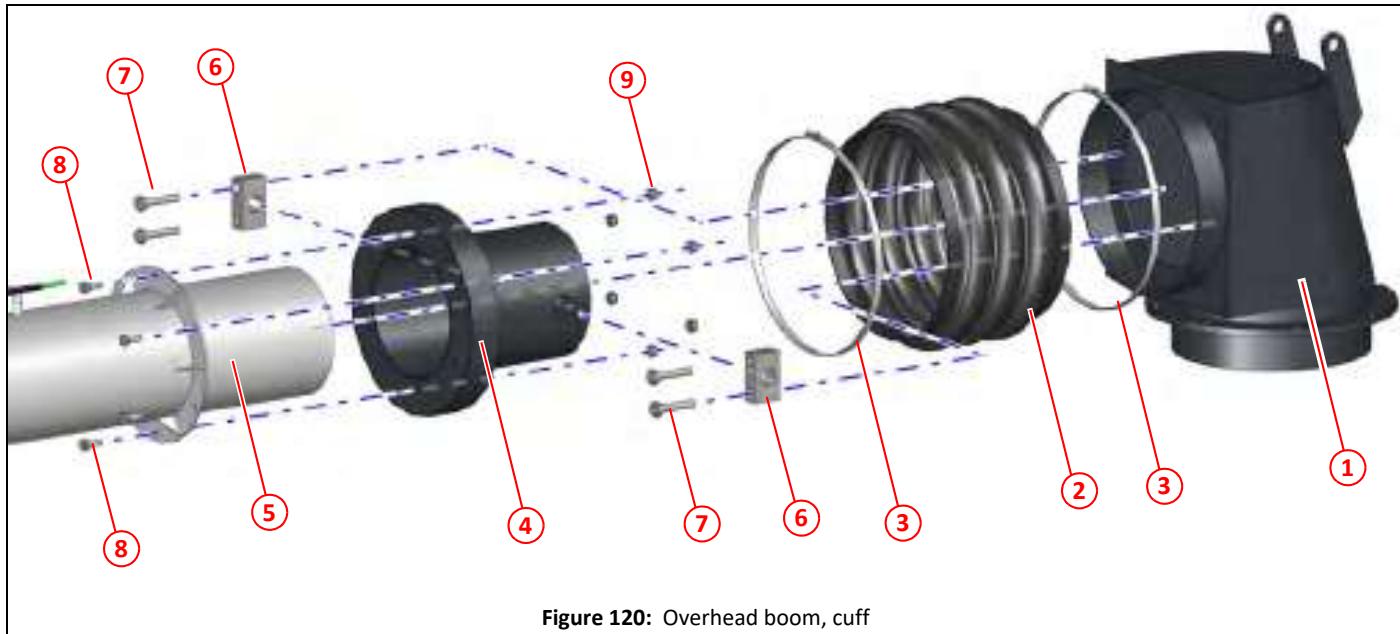
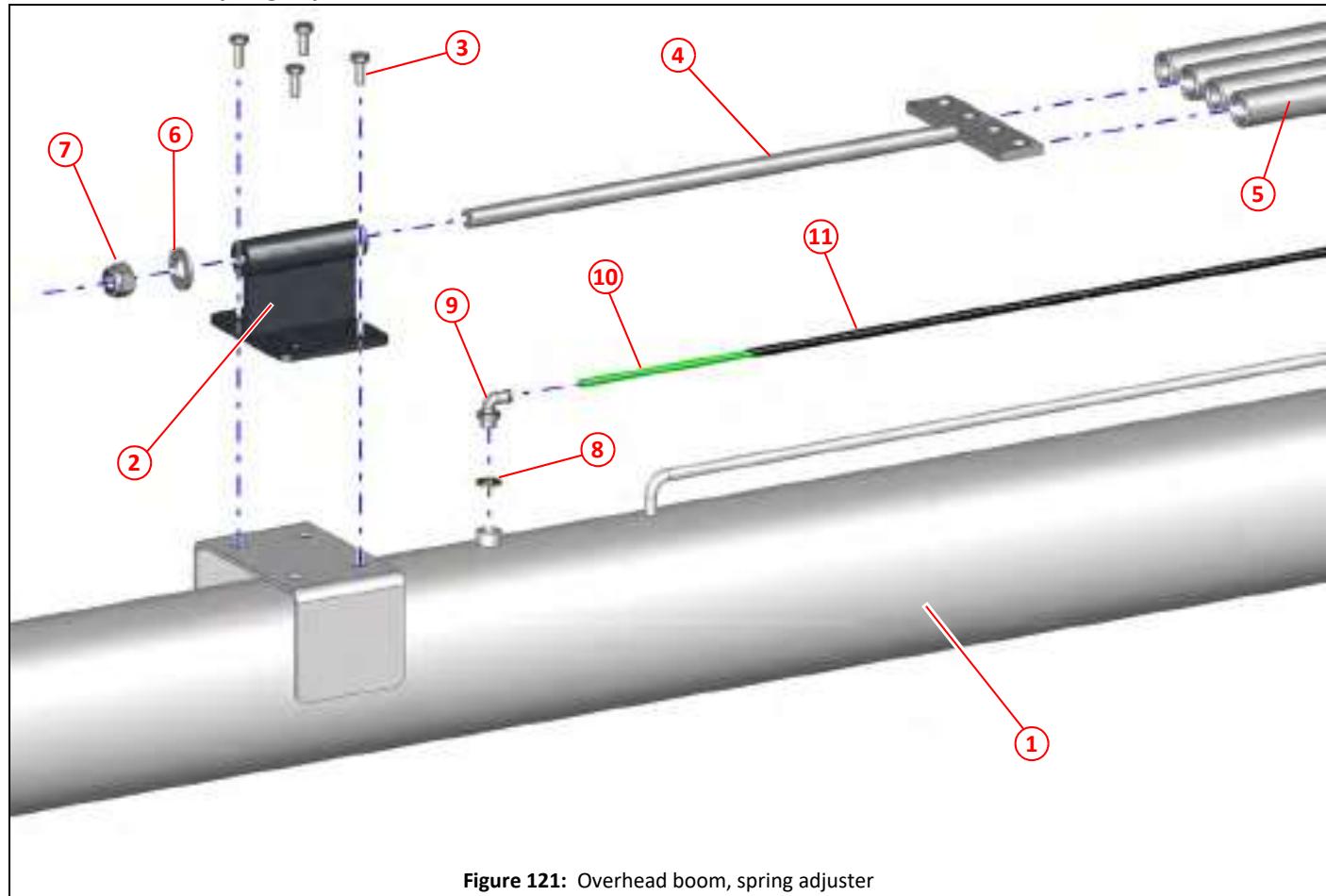


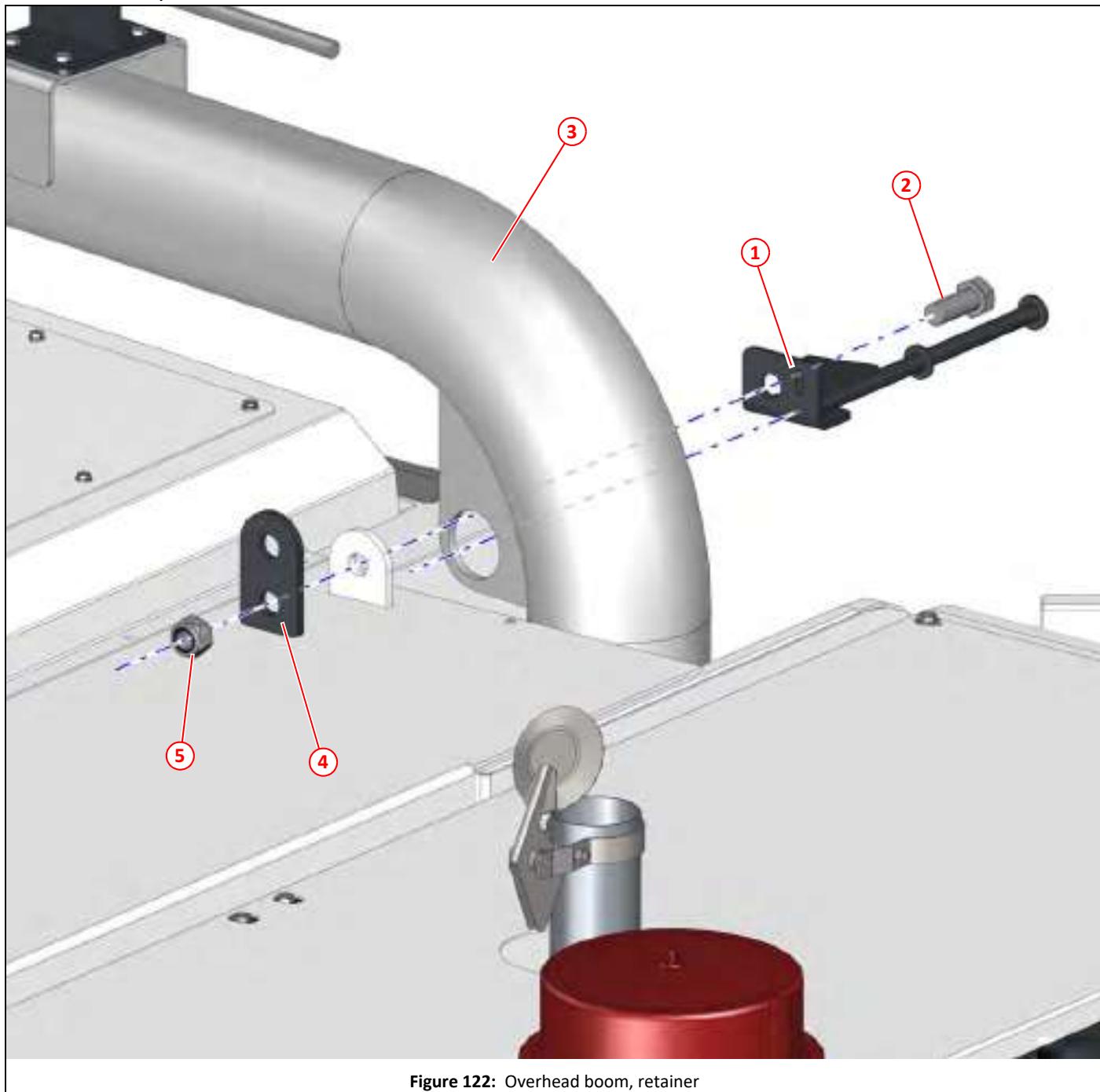
Figure 120: Overhead boom, cuff

| Item | Part No | Qty | Description                                       |
|------|---------|-----|---|
| ①    | 013793  | 1   | Boom elbow  |
| ②    | 044107  | 1   | Cuff, boom pivot                                  |
| ③    | 012933  | 2   | Jubilee clip, No 10.50 ( $\phi$ 235 - $\phi$ 267) |
| ④    | 044121  | 1   | Boom pivot, overhead boom                         |
| ⑤    | 047077  | 1   | Suction pipe with elbow, overhead boom            |
| ⑥    | 013798  | 2   | Pivot block                                       |
| ⑦    | 011035  | 4   | Setscrew M01 x 50                                 |
| ⑧    | 011010  | 6   | Setscrew M8 x 20                                  |
| ⑨    | 011073  | 6   | Nyloc nut T M8                                    |

## Overhead boom, spring adjuster

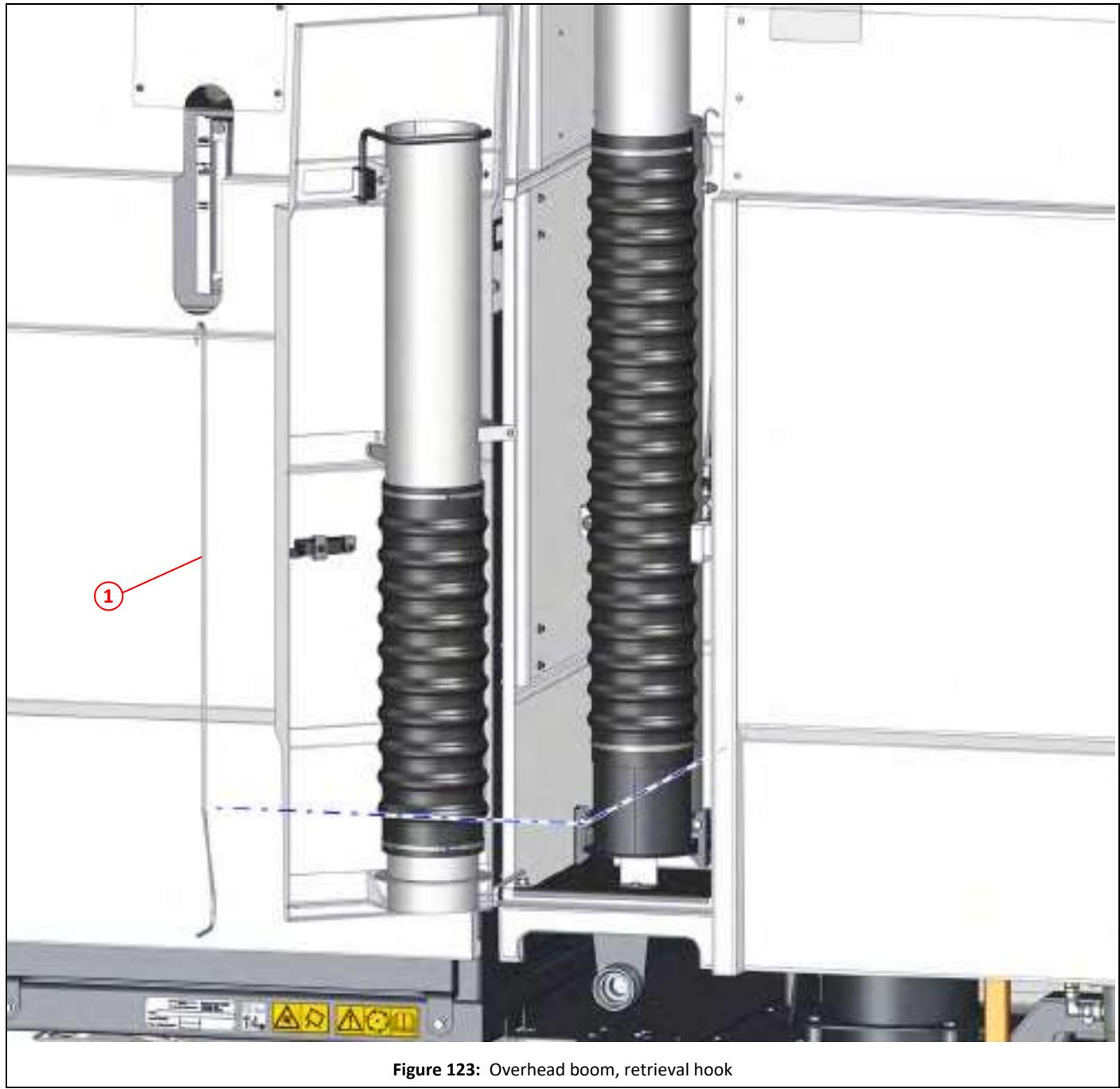


| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 047077  | 1   | Suction pipe with elbow, overhead boom                                    |
| ②    | 044126  | 1   | Bracket, spring tensioner   |
| ③    | 011010  | 4   | Setscrew M8 x 20  |
| ④    | 013804  | 1   | Tensioner, overhead boom  |
| ⑤    | 013805  | 4   | Spring 800mm long   |
| ⑥    | 011135  | 1   | Washer M16  |
| ⑦    | 011060  | 1   | Nyloc nut T M16   |
| ⑧    | 011152  | 1   | Dowty seal $\frac{1}{4}$ " BSP  |
| ⑨    | 023203  | 1   | Push in swivel elbow, $\varnothing 6 \times \frac{1}{4}$ " BSP            |
| ⑩    | 024650  | 1   | $\varnothing 6$ mm green air pipe, cut to length as required              |
| ⑪    | 004161  | 1   | Flex cable conduit, split, $\varnothing 15.7$ , cut to length as required |

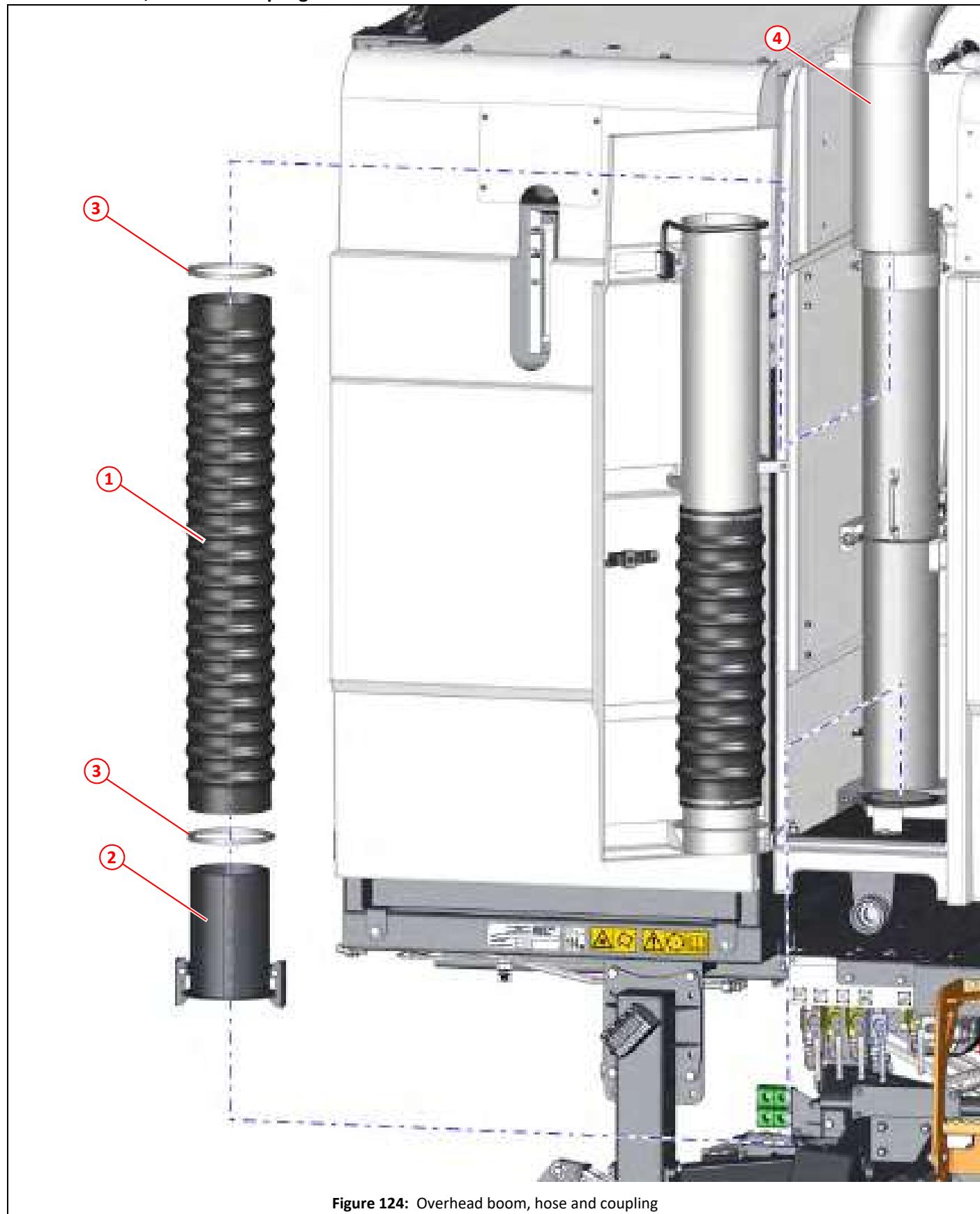
**Overhead boom, retainer**


| Item | Part No | Qty | Description                            | File |
|------|---------|-----|--|------|
| ①    | 044303  | 1   | Boom retainer                          |      |
| ②    | 011061  | 1   | Bolt M20 x 50                          |      |
| ③    | 047077  | 1   | Suction pipe with elbow, overhead boom |      |
| ④    | 045670  | 1   | Lifting eye plate, overhead boom       |      |
| ⑤    | 011082  | 1   | Nyloc nut M20                          |      |

## Overhead boom, retrieval hook

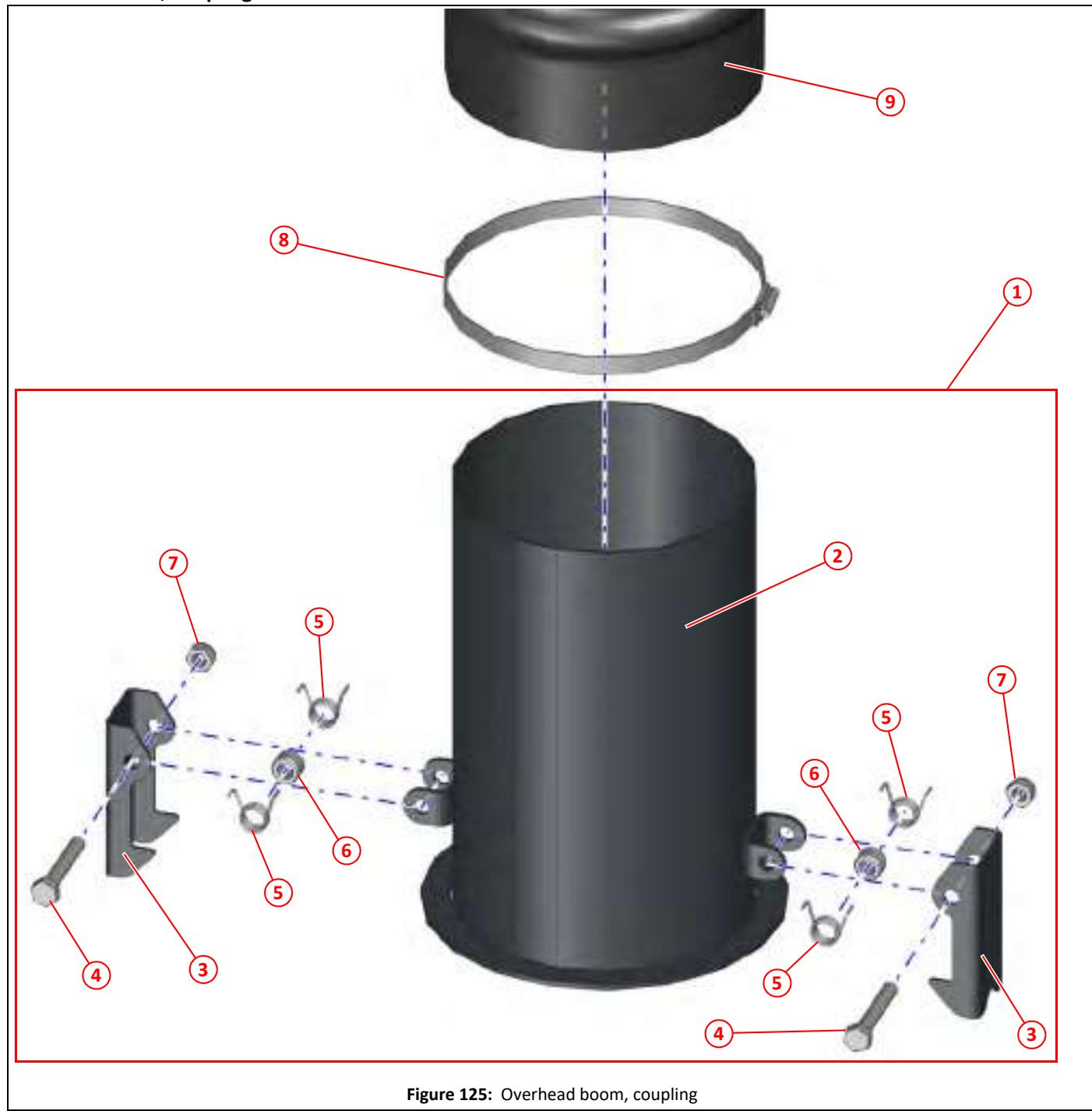


| Item | Part No | Qty | Description                                     | Diagram |
|------|---------|-----|---|---------|
| ①    | 044753  | 1   | Hook, boom retrieval. Stored in back of locker. |         |

**Overhead boom, hose and coupling**

**Figure 124:** Overhead boom, hose and coupling

| Item | Part No | Qty | Description  |  |
|------|---------|-----|--|--|
| ①    | 047088  | 1   | Hose 1.025m, overhead boom                                 |  |
| ②    | 050988  | 1   | Hose coupling, overhead boom, complete                     |  |
| ③    | 010519  | 2   | Jubilee clip, No 7 ( $\varnothing 135 - \varnothing 165$ ) |  |
| ④    | 047077  | 1   | Suction pipe with elbow, overhead boom                     |  |

## Overhead boom, coupling



| Item | Part No | Qty | Description                            |
|------|---------|-----|--|
| ①    | 050988  | 1   | Hose coupling, overhead boom, complete |
| ②    | 044123  | 1   | Hose coupling, overhead boom           |
| ③    | 044125  | 2   | Clamp lever, overhead boom             |
| ④    | 011016  | 2   | Setscrew M8 x 50                       |
| ⑤    | 051184  | 4   | Latch spring, overhead boom            |
| ⑥    | 033463  | 2   | Spacer ø15 x ø9 x 10                   |
| ⑦    | 011073  | 2   | Nyloc nut T M8                         |
| ⑧    | 010519  | 1   | Jubilee clip, No 7 (ø135 - ø165)       |
| ⑨    | 047088  | 1   | Hose 1.025m, overhead boom             |

## Overhead boom, coupling stowage bracket

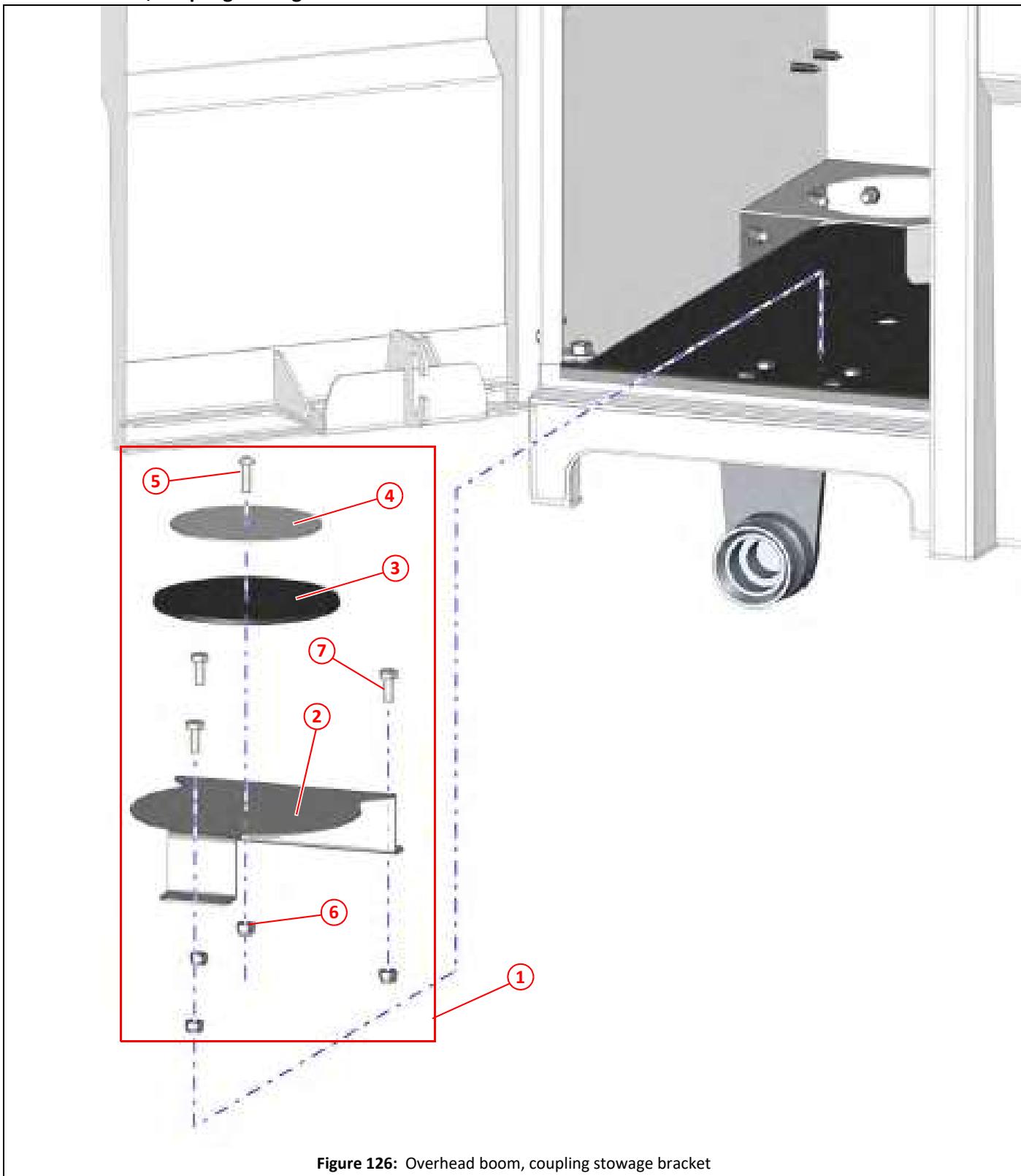


Figure 126: Overhead boom, coupling stowage bracket

| Item | Part No | Qty | Description                                       |
|------|---------|-----|---|
| (1)  | 044128  | 1   | Hose coupling stowage, complete                   |
| (2)  | 044127  | 1   | Bracket, hose coupling stowage                    |
| (3)  | 044129  | 1   | Rubber sealing disc                               |
| (4)  | 044130  | 1   | Sealing plate                                     |
| (5)  | 000281  | 1   | Socket button head screw M8 x 25, stainless steel |
| (6)  | 000263  | 4   | Nyloc nut T M8, stainless steel                   |
| (7)  | 000256  | 3   | Setscrew M8 x 20, stainless steel                 |

## Overhead boom, boom extension

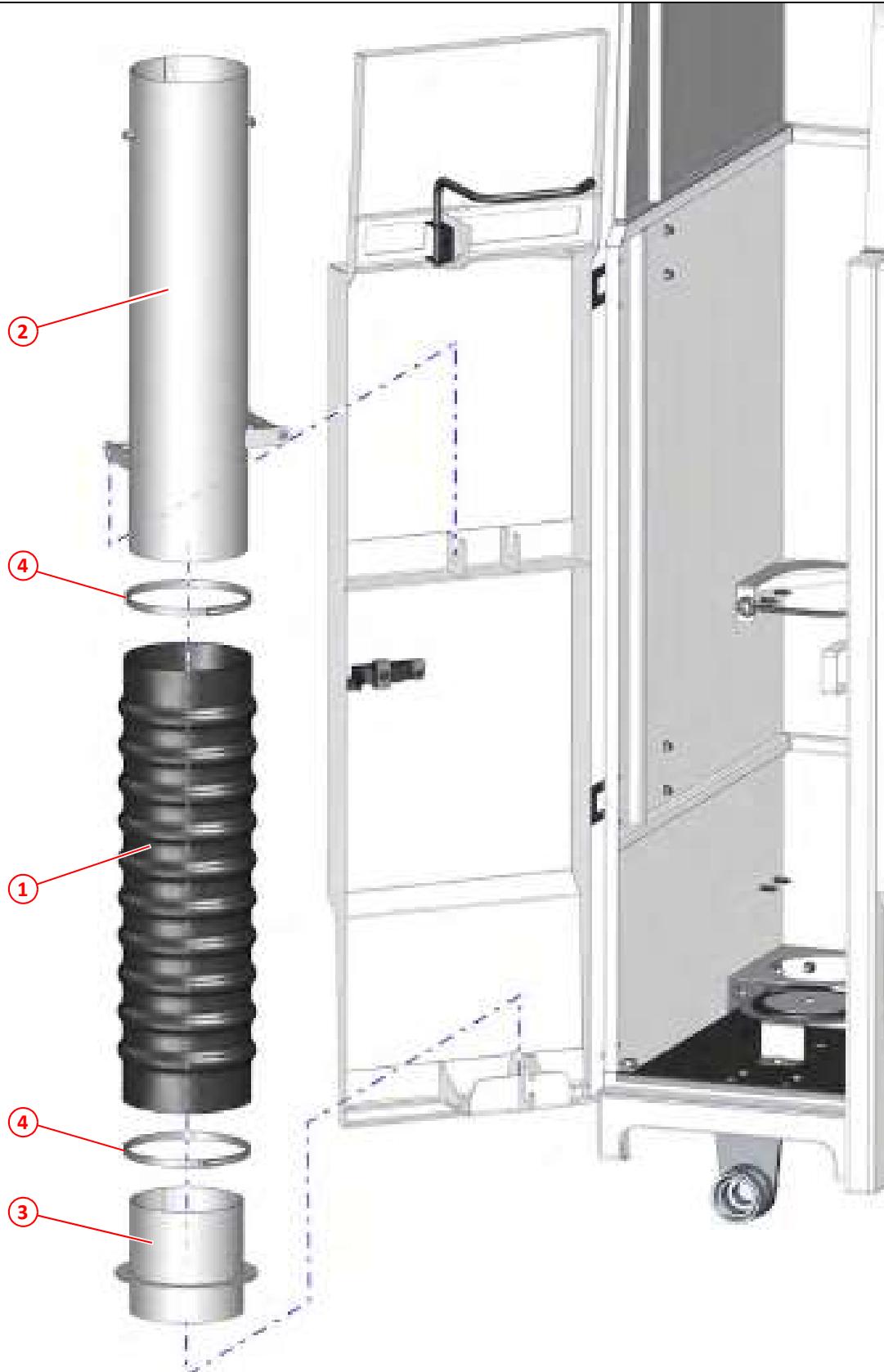


Figure 127: Overhead boom, boom extension

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 044106  | 1   | hose, boom extension                                       |
| ②    | 044141  | 1   | Extension overhead boom                                    |
| ③    | 044140  | 1   | Hose coupling, overhead boom extension                     |
| ④    | 010519  | 2   | Jubilee clip, No 7 ( $\varnothing 135 - \varnothing 165$ ) |

## Overhead boom, boom extension hose saver

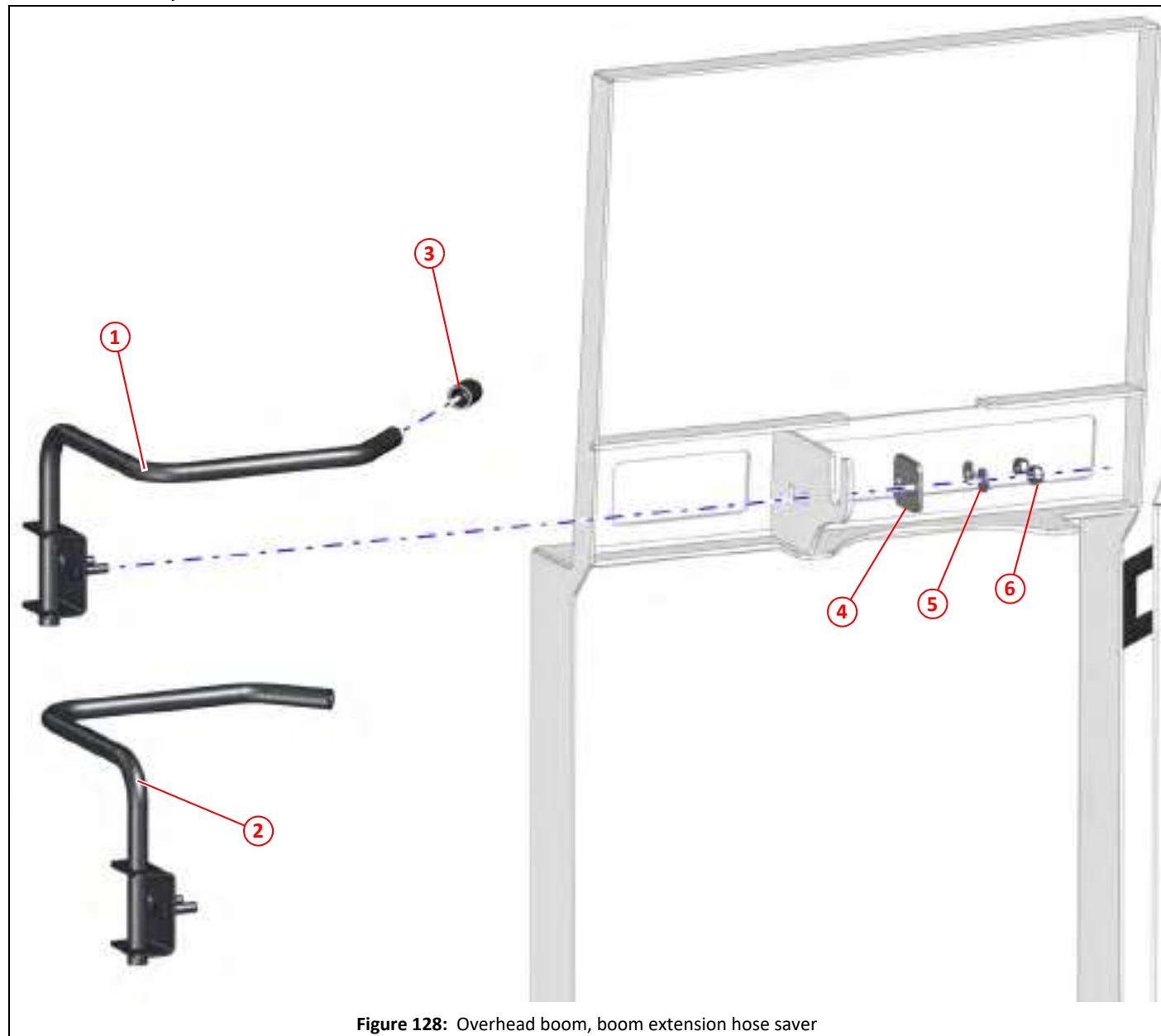


Figure 128: Overhead boom, boom extension hose saver

| Item | Part No | Qty | Description                                 | File |
|------|---------|-----|---|------|
| ①    | 045504  | 1   | Hose protector, for left side overhead boom |      |
| ②    | 045993  | 1   | Hose protector, for left side overhead boom |      |
| ③    | 043065  | 1   | Cap ø12                                     |      |
| ④    | 027989  | 1   | Clamp plate                                 |      |
| ⑤    | 000254  | 2   | Washer M6, stainless steel                  |      |
| ⑥    | 000253  | 2   | Nyloc nut T M6                              |      |

## Overhead boom, boom extension tube

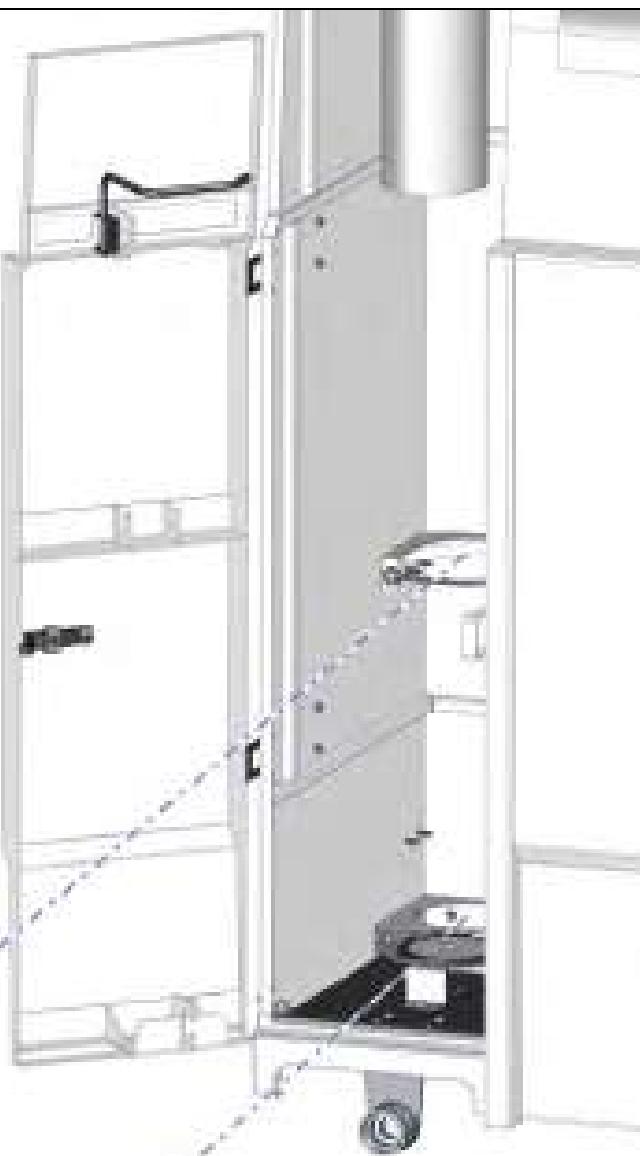
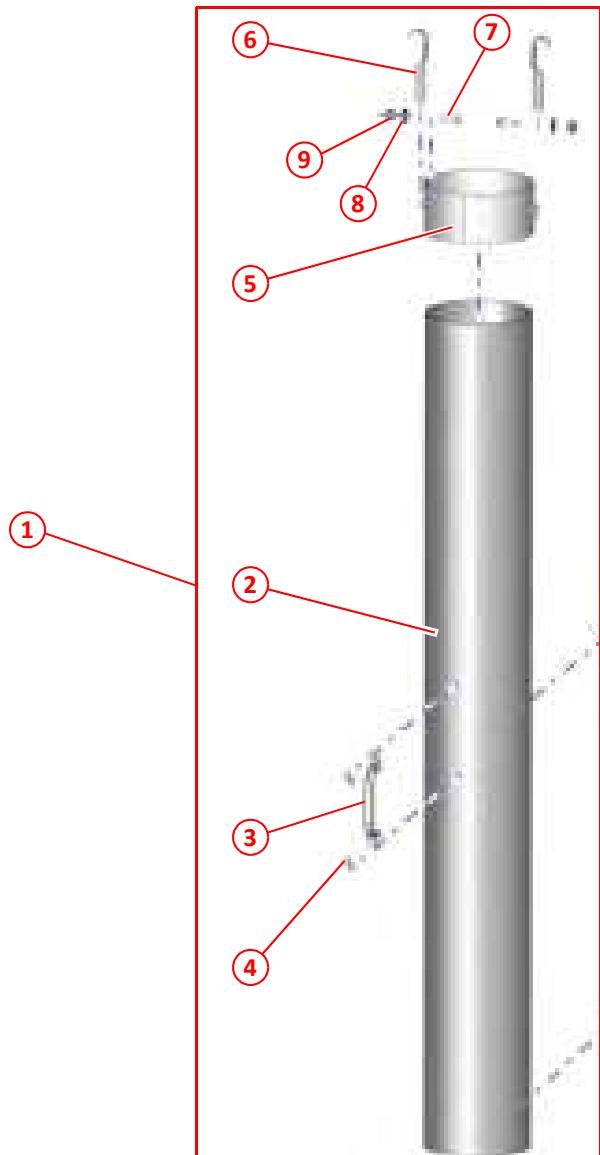
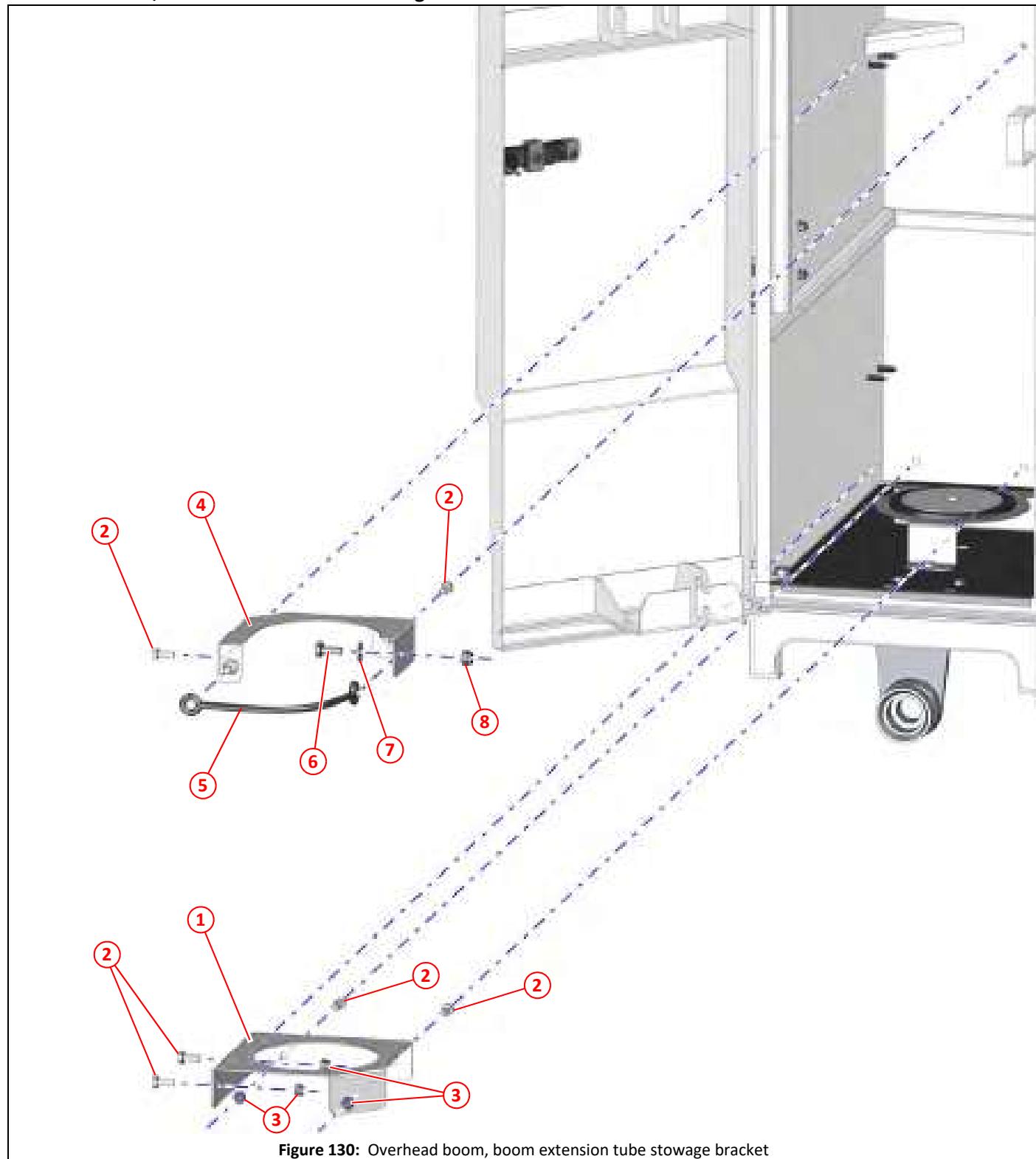


Figure 129: Overhead boom, boom extension tube

| Item | Part No | Qty | Description                       |  |
|------|---------|-----|-----------------------------------|--|
| ①    | 044155  | 1   | Boom extension 1200mm, complete   |  |
| ②    | 044153  | 1   | Boom extension tube 1200mm        |  |
| ③    | 010502  | 1   | Pull handle                       |  |
| ④    | 011131  | 4   | Seal blind rivet Ø4.8 x 18        |  |
| ⑤    | 044154  | 1   | Boom extension collar             |  |
| ⑥    | 044014  | 2   | Spring fasteners, stainless steel |  |
| ⑦    | 000281  | 2   | Socket button head screw M8 x 25  |  |
| ⑧    | 000264  | 2   | Washer M8, stainless steel        |  |
| ⑨    | 000263  | 2   | Nyloc nut T M8, stainless steel   |  |

**Overhead boom, boom extension tube stowage brackets**

**Figure 130:** Overhead boom, boom extension tube stowage bracket

| Item | Part No | Qty | Description                           | File |
|------|---------|-----|---------------------------------------|------|
| ①    | 044149  | 1   | Stowage bracket lower, boom extension |      |
| ②    | 000256  | 6   | Setscrew M8 x 20, stainless steel     |      |
| ③    | 000263  | 4   | Nyloc nut T M8, stainless steel       |      |
| ④    | 044717  | 1   | Stowage bracket upper, boom extension |      |
| ⑤    | 044007  | 1   | Mini-tye No. 10                       |      |
| ⑥    | 000280  | 1   | Setscrew M10 x 25, stainless steel    |      |
| ⑦    | 000270  | 1   | Washer M10, stainless steel           |      |
| ⑧    | 000269  | 1   | Nyloc nut T M10, stainless steel      |      |



# Suction fan

| <i>Description</i>              | <i>Page</i> |
|---------------------------------|-------------|
| Suction fan .....               | 152         |
| Suction fan motor .....         | 154         |
| Suction fan guard .....         | 156         |
| Suction fan filter screen ..... | 158         |

## Suction fan

### Suction fan

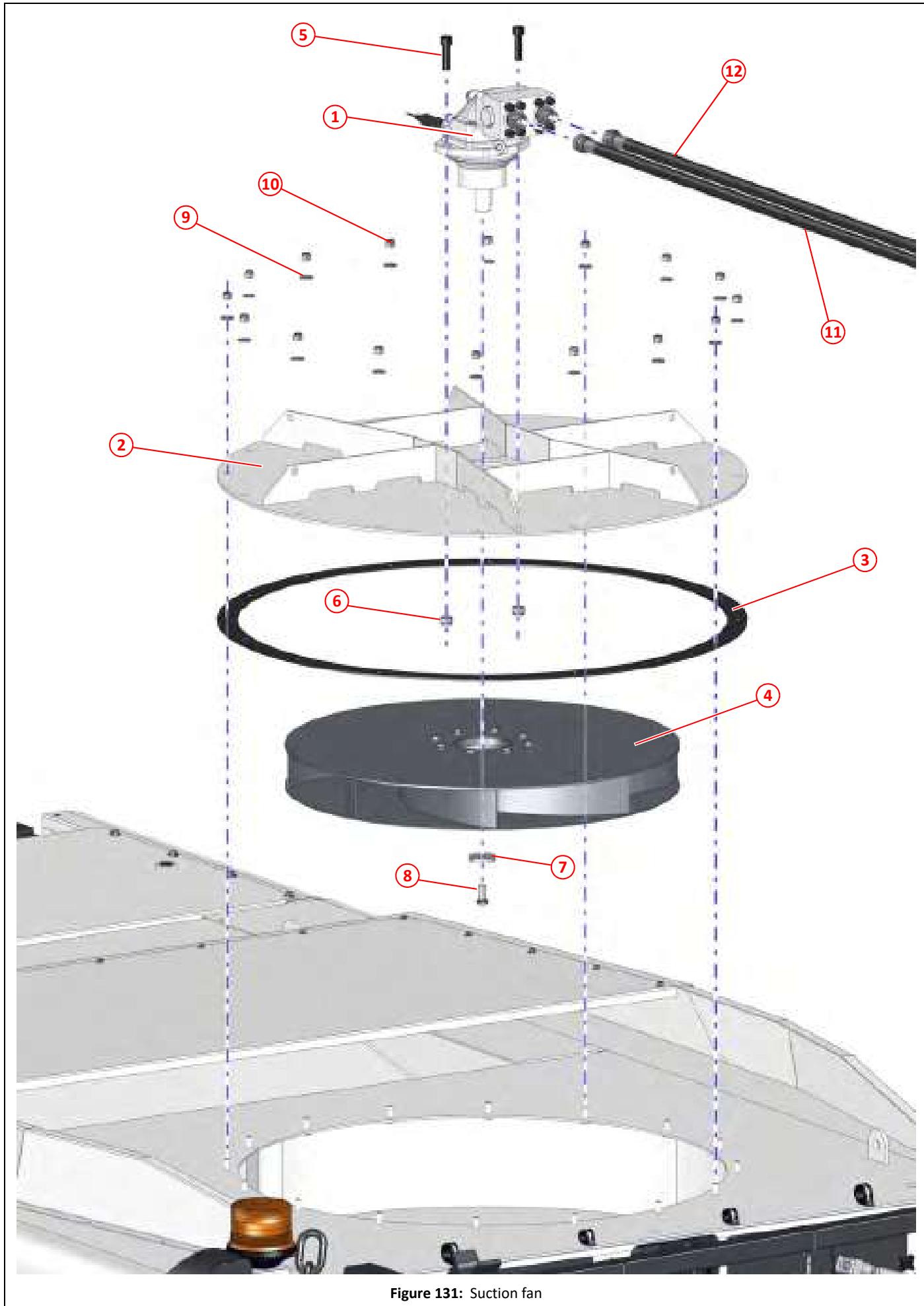


Figure 131: Suction fan

| Item | Part No | Qty | Description  |  |
|------|---------|-----|--|--|
| ①    | 025564  | 1   | Fan motor assembly   |  |
| ②    | 041468  | 1   | Fan plate  |  |
| ③    | 010546  | 1   | Inseal strip 3 x 38  |  |
| ④    | 041456  | 1   | High speed impeller  |  |
| ⑤    | 000343  | 2   | Socket cap head bolt M14 x 50, black                               |  |
| ⑥    | 011127  | 2   | Nyloc nut T M14  |  |
| ⑦    | 044926  | 1   | WASHER ø50 x ø12.5 x 8, stainless steel                            |  |
| ⑧    | 011052  | 1   | Setscrew M12 x 30  |  |
| ⑨    | 011094  | 16  | Washer M10   |  |
| ⑩    | 011075  | 16  | Nyloc nut T M10  |  |
| ⑪    | 001322  | 1   | Hose $\frac{5}{8}''$ x 1550 with $\frac{3}{4}''$ BSP straight ends |  |
| ⑫    | 001323  | 1   | Hose $\frac{5}{8}''$ x 1700 with $\frac{3}{4}''$ BSP straight ends |  |

## Suction fan

### Suction fan motor

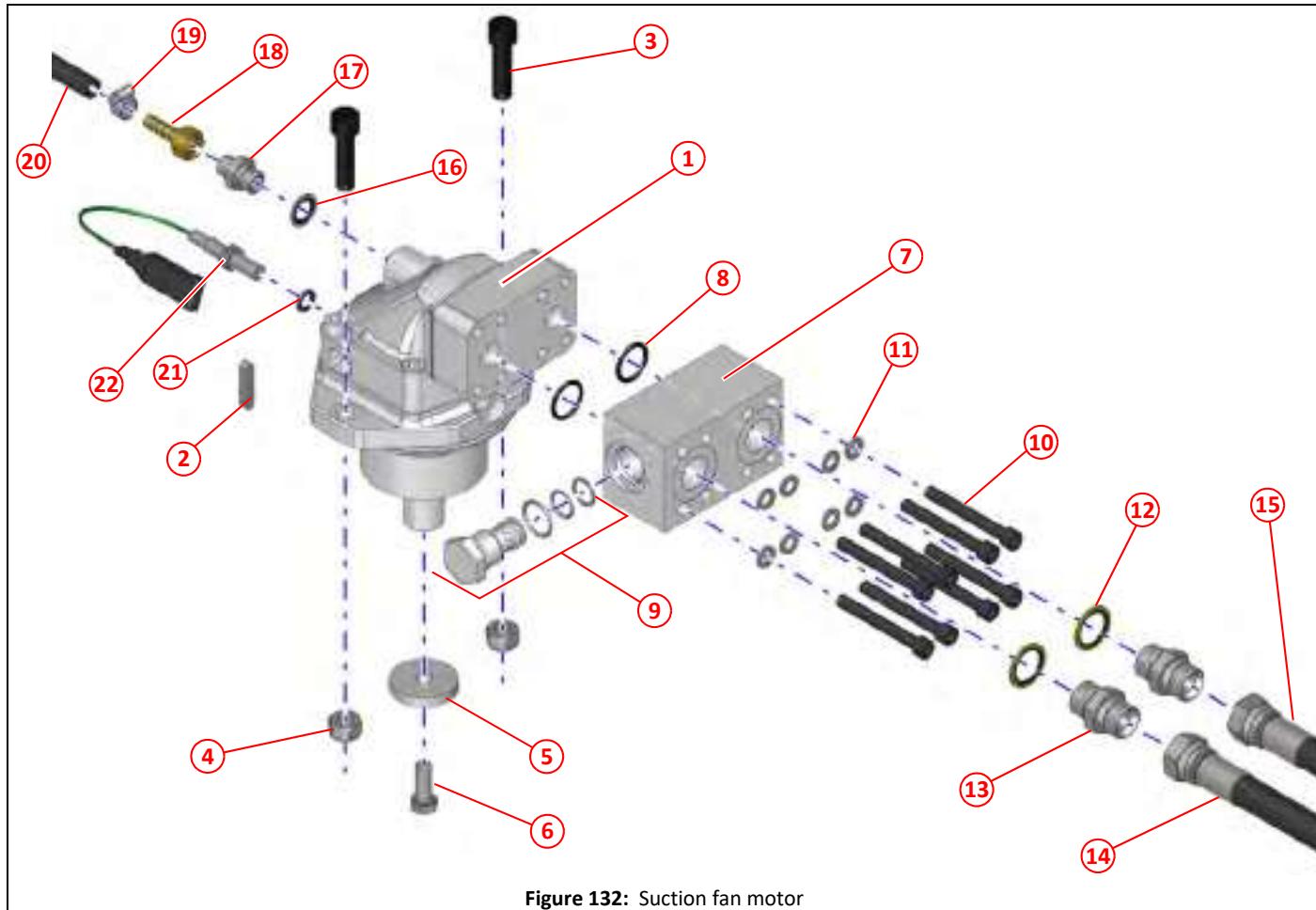


Figure 132: Suction fan motor

| Item | Part No  | Qty | Description   |  |
|------|----------|-----|---|--|
| ①    | 024641   | 1   | Motor F12-030-MF-CH-K-000-000-P                                     |  |
| ②    | 013292   | 1   | Key for item ①  |  |
| ③    | 000343   | 2   | Socket cap head bolt M14 x 50, black                                |  |
| ④    | 011127   | 2   | Nyloc nut T M14   |  |
| ⑤    | 044926   | 1   | Washer ø50 x ø12.5 x 8, stainless steel                             |  |
| ⑥    | 011052   | 1   | Setscrew M12 x 30   |  |
| ⑦    | 041633 * | 1   | Manifold  |  |
| ⑧    | 041634 * | 2   | 'O' ring  |  |
| ⑨    | 041635 * | 1   | Check valve HCV12-20, includes seals                                |  |
| ⑩    | 000048   | 8   | Socket cap head screw M10 x 80                                      |  |
| ⑪    | 011095   | 8   | Spring washer M10   |  |
| ⑫    | 011155   | 2   | Dowty seal $\frac{3}{4}$ " BSP                                      |  |
| ⑬    | 011161   | 2   | Adapter $\frac{3}{4}$ " BSP   |  |
| ⑭    | 001322   | 1   | Hose $\frac{5}{8}$ " x 1550 with $\frac{3}{4}$ " BSP straight ends  |  |
| ⑮    | 001323   | 1   | Hose $\frac{5}{8}$ " x 1700 with $\frac{3}{4}$ " BSP straight ends  |  |
| ⑯    | 011247   | 1   | Dowty seal M18  |  |
| ⑰    | 011248   | 1   | Adapter M18 x $\frac{3}{8}$ " BSP                                   |  |
| ⑱    | 010921   | 1   | $\frac{3}{8}$ " BSP x $\frac{3}{8}$ " hose end, complete with nut   |  |
| ⑲    | 010516   | 1   | Hose clip, worm drive, No MOO [ $\varnothing$ 11- $\varnothing$ 16] |  |
| ⑳    | 010958   | 1   | Hose, $\frac{3}{8}$ ", fuel, length as required                     |  |
| ㉑    | 011215   | 1   | Dowty seal M12  |  |
| ㉒    | 025184   | 1   | Speed sensor  |  |
| *    | 041564   | 1   | Anti-cavitation valve assembly, includes items ⑦, ⑧ and ⑨           |  |

## Suction fan

### Suction fan guard

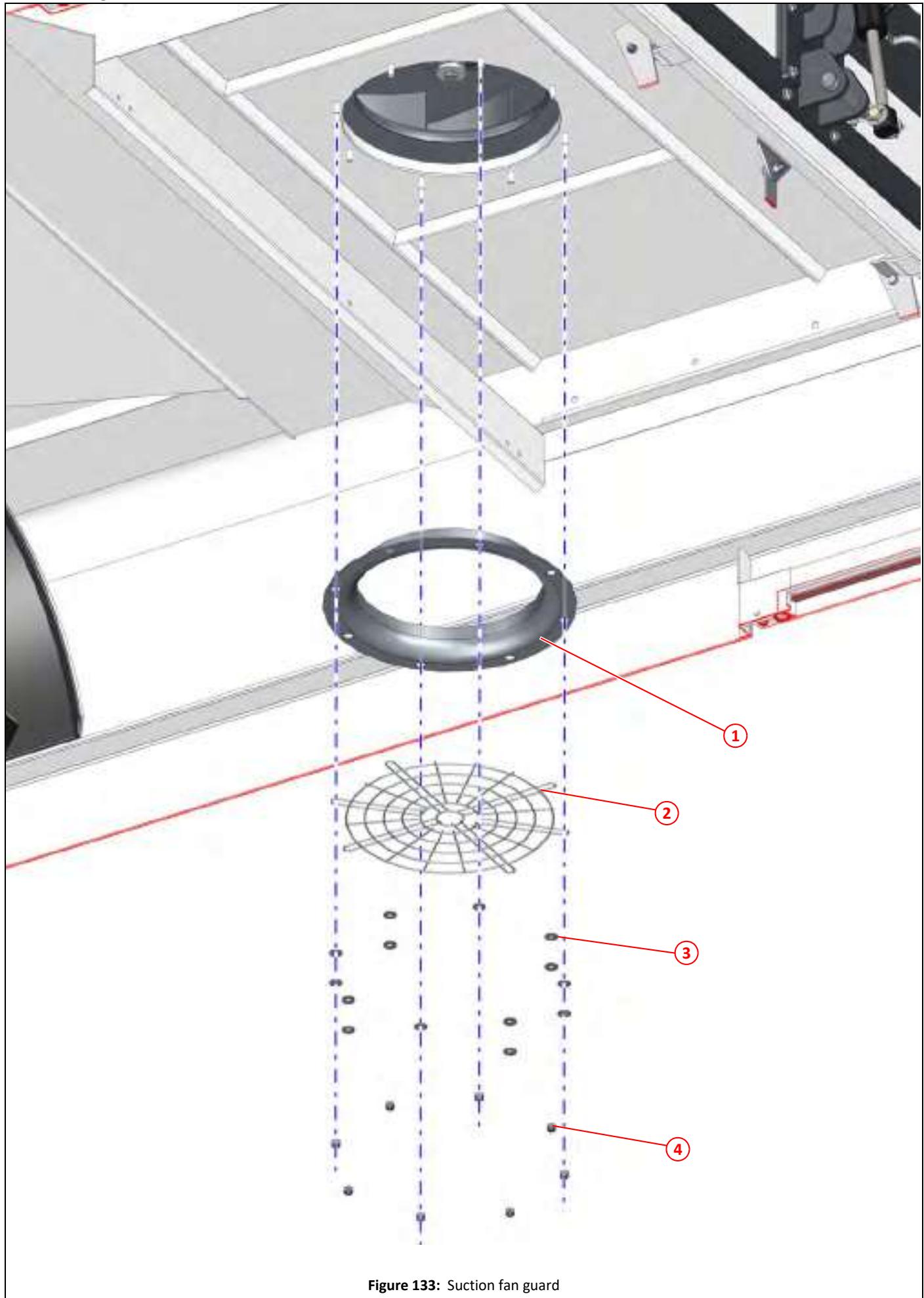


Figure 133: Suction fan guard

| Item | Part No | Qty | Description                     |  |
|------|---------|-----|---------------------------------|--|
| ①    | 038568  | 1   | Inlet cone, stainless steel     |  |
| ②    | 039674  | 1   | Fan guard                       |  |
| ③    | 000264  | 8   | Washer M8, stainless steel      |  |
| ④    | 000263  | 8   | Nyloc nut T M8, stainless steel |  |

## Suction fan

### Suction fan filter screen

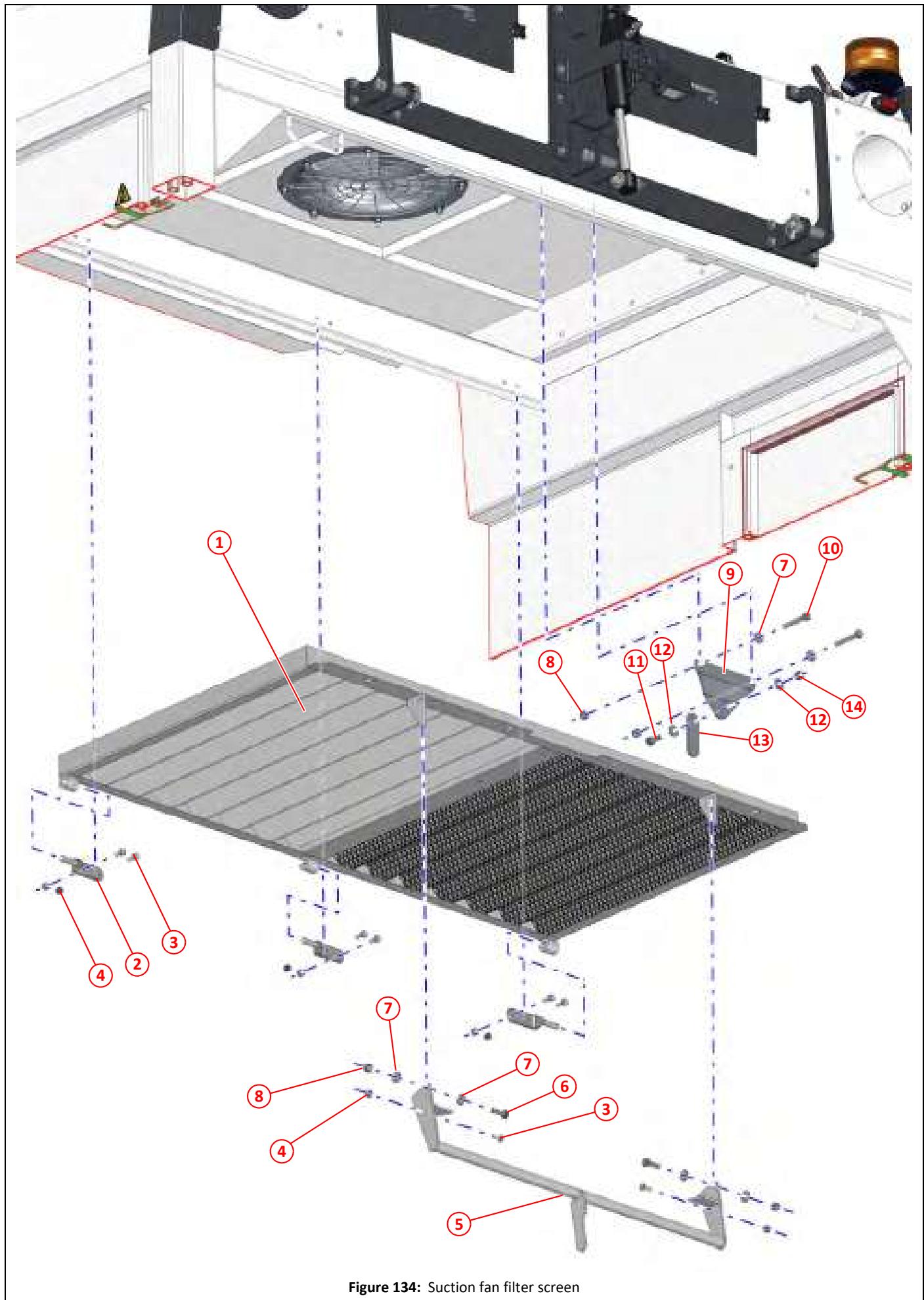


Figure 134: Suction fan filter screen

| Item | Part No | Qty | Description                        |  |
|------|---------|-----|------------------------------------|--|
| ①    | 031883  | 1   | Fan filter screen 4000             |  |
| ②    | 025245  | 3   | Gudgeon                            |  |
| ③    | 000256  | 8   | Setscrew M8 x 20, stainless steel  |  |
| ④    | 000263  | 8   | Nyloc nut T M8, stainless steel    |  |
| ⑤    | 039312  | 1   | Screen latch, long handle          |  |
| ⑥    | 000462  | 2   | Setscrew M10 x 35, stainless steel |  |
| ⑦    | 011094  | 6   | Washer M10                         |  |
| ⑧    | 011075  | 4   | Nyloc nut T M10                    |  |
| ⑨    | 028052  | 1   | Safety bracket                     |  |
| ⑩    | 011043  | 2   | Bolt M10 x 70                      |  |
| ⑪    | 000461  | 1   | Setscrew M10 x 30, stainless steel |  |
| ⑫    | 000270  | 2   | Washer M10, stainless steel        |  |
| ⑬    | 028053  | 1   | Safety link                        |  |
| ⑭    | 000269  | 1   | Nyloc nut T M10, stainless steel   |  |



# Hopper and body

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## Hopper and body arrangement, external

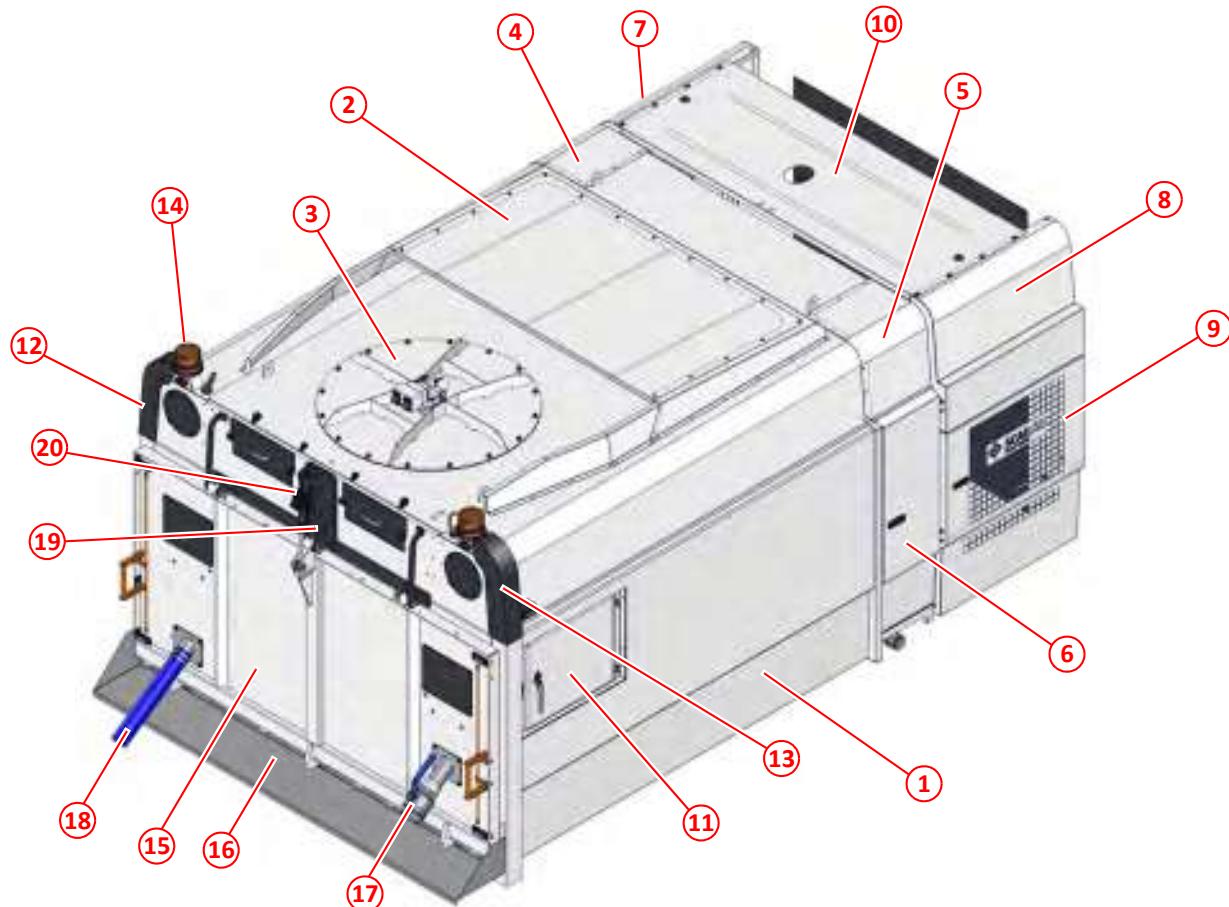
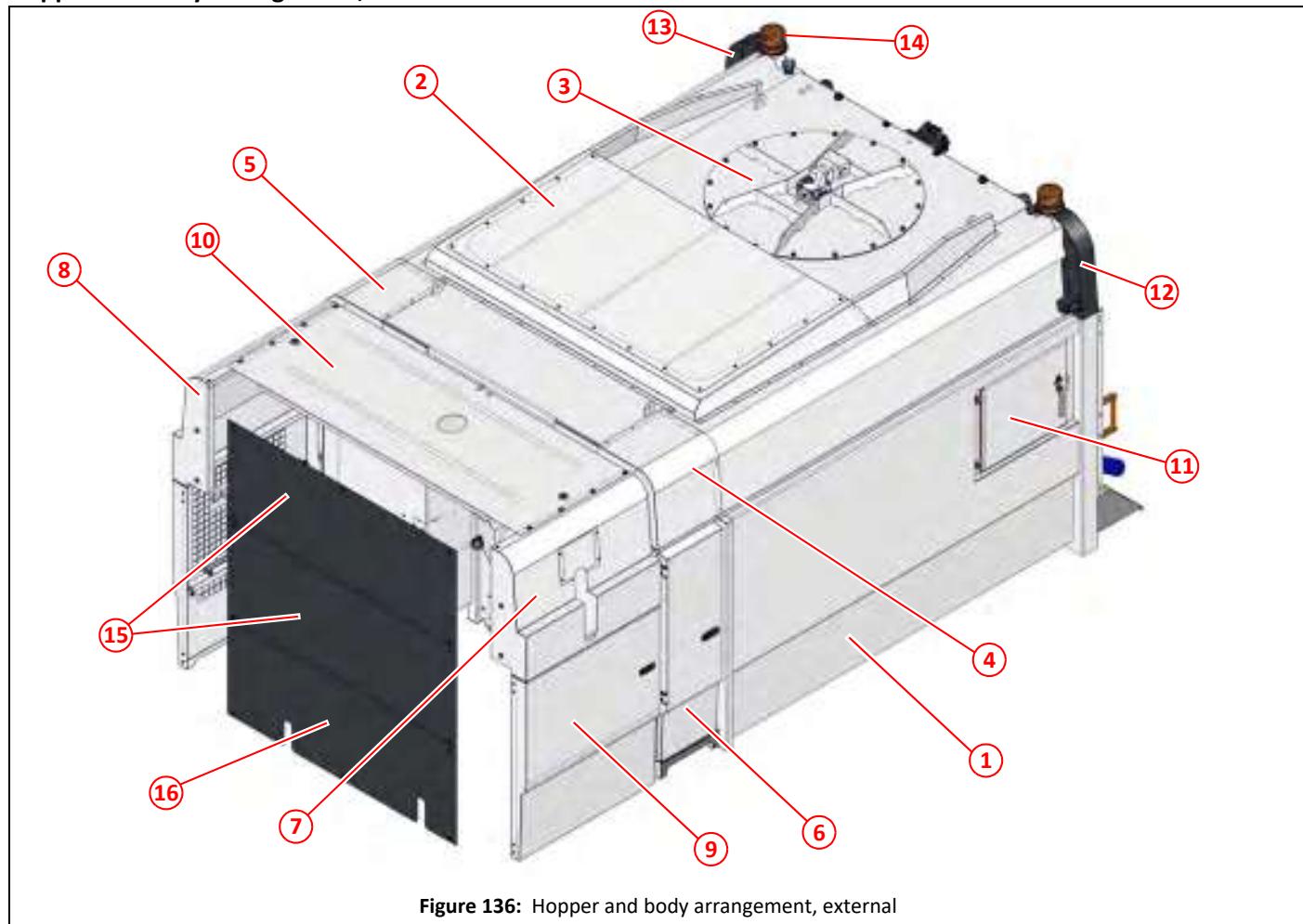


Figure 135: Hopper and body arrangement, external

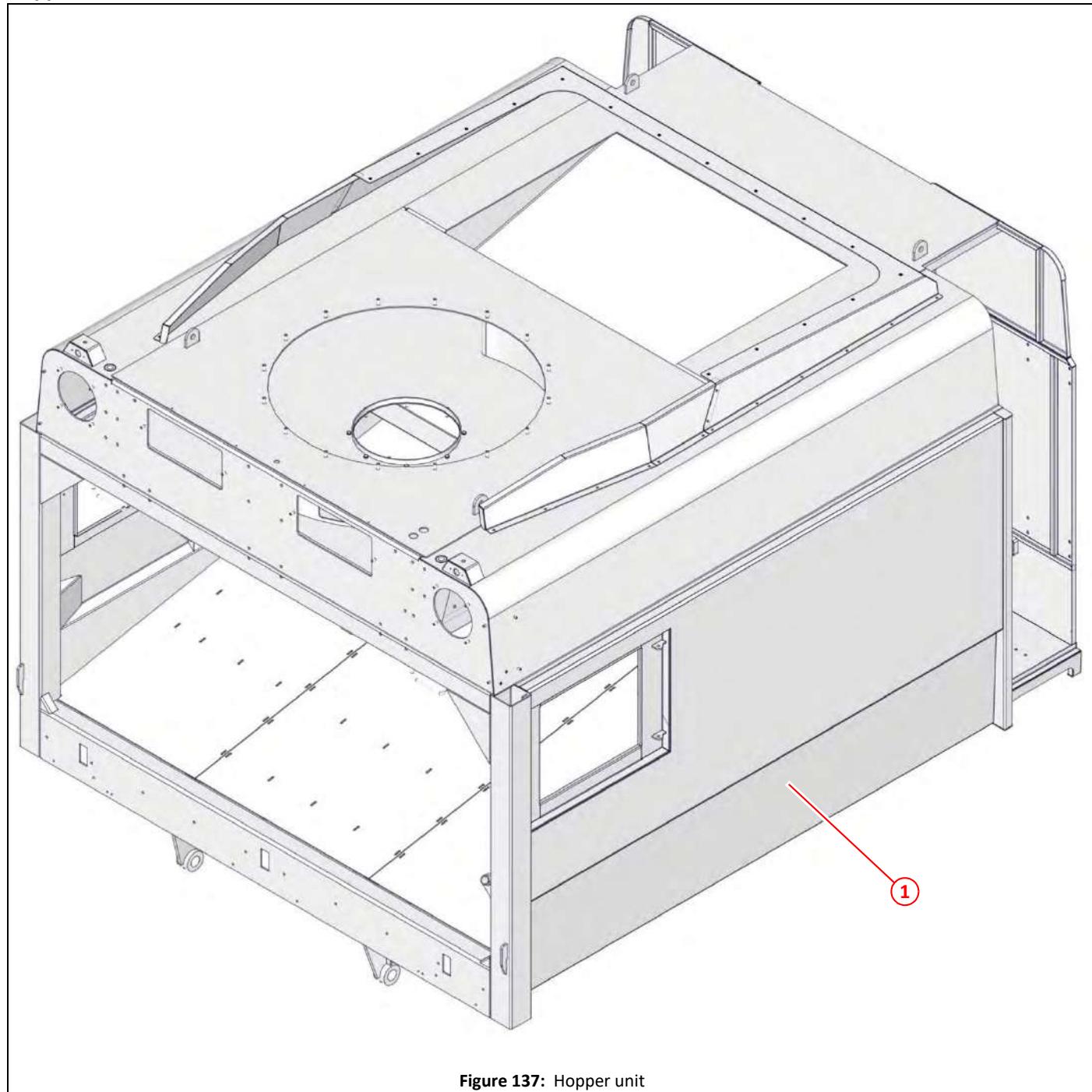
| Item | Part No | Qty | Description                            |         |
|------|---------|-----|--|---------|
| ①    | 046911  | 1   | Hopper, welded                         | 163,164 |
| ②    | 040042  | 1   | Cover lid, hopper, low line            | 165     |
| ③    |         | 1   | Suction fan                            | 152     |
| ④    | 044688  | 1   | Cover, hopper locker, left hand side   | 169     |
| ⑤    | 044689  | 1   | Cover, hopper locker, right hand side  | 169     |
| ⑥    | 048551  | 1   | Locker door, right hand side           | 171     |
| ⑦    | 046910  | 1   | Hopper extension wing, oil filler      | 355     |
| ⑧    | 047367  | 1   | Hopper extension wing, plain           | 356     |
| ⑨    | 048694  | 1   | Front door, right hand side            | 358     |
| ⑩    | 048689  | 1   | Roof panel, hopper front               | 354     |
| ⑪    | 036363  | 1   | Door, side loading hatch               | 173     |
| ⑫    | 047032  | 1   | Capping, hopper, left hand side        | 174     |
| ⑬    | 047033  | 1   | Capping, hopper, right hand side       | 175     |
| ⑭    | 046659  | 2   | LED beacon, single bolt fixing, 10-30V | 176     |
| ⑮    | 046850  | 1   | Rear door                              | 182     |
| ⑯    | 046845  | 1   | Hopper chute, large                    | 200     |
| ⑰    |         | 1   | Hopper water drain, valve              | 190     |
| ⑱    |         | 1   | Hopper water drain, hose               | 189     |
| ⑲    |         | 1   | Rear door hinge and ram                | 198,287 |
| ⑳    |         |     | Camera, rear view                      | 201     |

**Hopper and body arrangement, external**


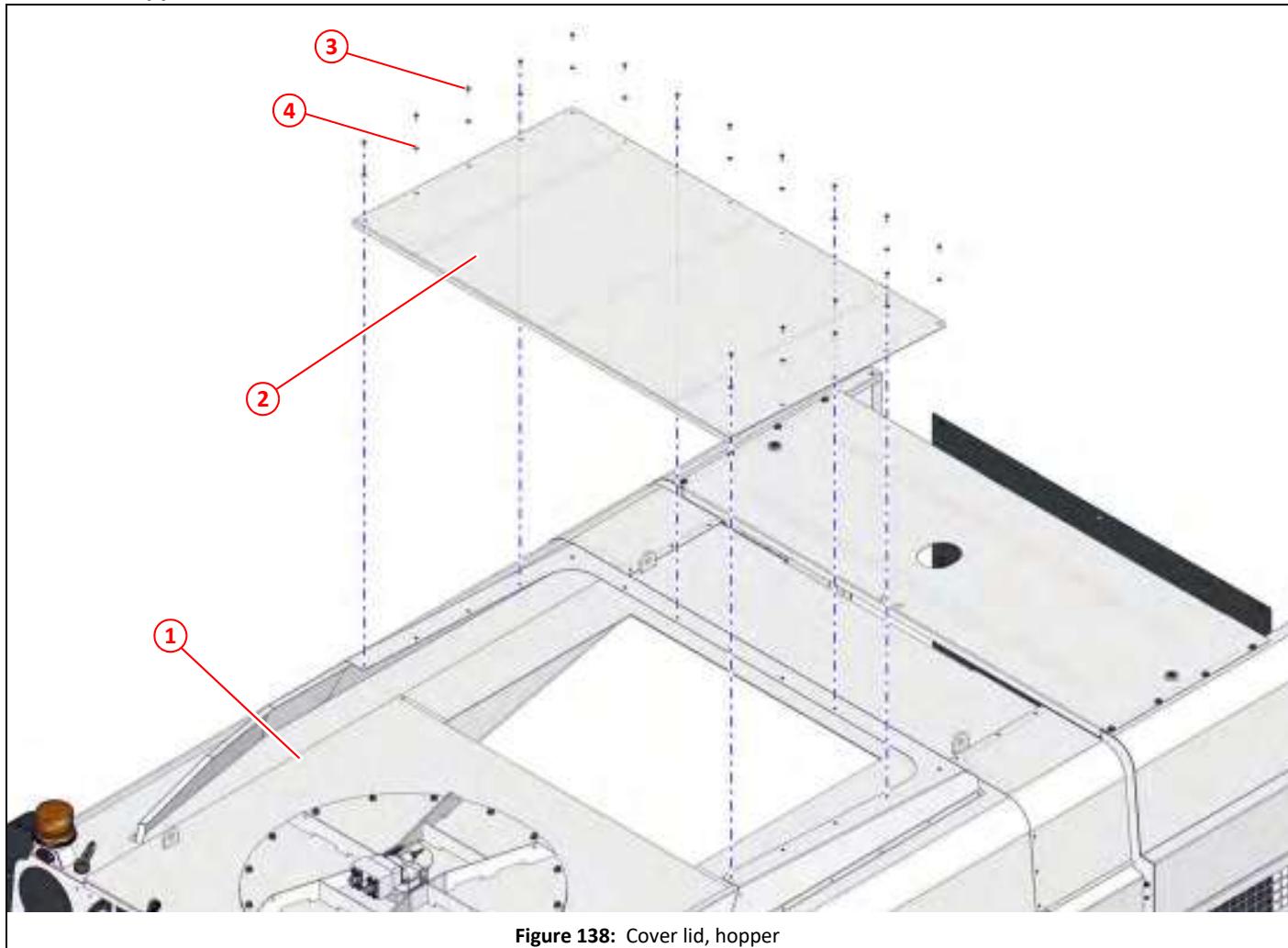
| Item | Part No  | Qty | Description                                       |         |
|------|----------|-----|---|---------|
| ①    | 046911   | 1   | Hopper, welded                                    | 162,164 |
| ②    | 040042   | 1   | Cover lid, hopper, low line                       | 165     |
| ③    |          | 1   | Suction fan                                       | 152     |
| ④    | 044688   | 1   | Cover, hopper locker, left hand side              | 169     |
| ⑤    | 044689   | 1   | Cover, hopper locker, right hand side             | 169     |
| ⑥    | 048550   | 1   | Locker door, left hand side                       | 170     |
| ⑦    | 046910   | 1   | Hopper extension wing, oil filler                 | 355     |
| ⑧    | 047367   | 1   | Hopper extension wing, plain                      | 356     |
| ⑨    | 046924   | 1   | Front door, left hand side                        | 357     |
| ⑩    | 048689   | 1   | Roof panel, hopper front                          | 354     |
| ⑪    | 036363   | 1   | Door, side loading hatch                          | 172     |
| ⑫    | 047032   | 1   | Capping, hopper, left hand side                   | 174     |
| ⑬    | 047033   | 1   | Capping, hopper, right hand side                  | 175     |
| ⑭    | 046659   | 2   | LED beacon, single bolt fixing, 10-30V            | 176     |
| ⑮    | 044867 * | 2   | End panel   | 359     |
| ⑯    | 043464   | 1   | End panel, for use if auxiliary water tank fitted | 359     |

\*. If an auxiliary water tank is not fitted then the quantity will be 3.

### Hopper unit



| Item | Part No | Qty | Description    |         |
|------|---------|-----|----------------|---------|
| ①    | 046911  | 1   | Hopper, welded | 162,163 |

**Cover lid, hopper**


| Item | Part No | Qty | Description                 |             |
|------|---------|-----|-----------------------------|-------------|
| ①    | 046911  | 1   | Hopper, welded              | 162,163,164 |
| ②    | 040042  | 1   | Cover lid, hopper, low line |             |
| ③    | 011001  | 16  | Setscrew HT M6 x 16         |             |
| ④    | 011090  | 16  | Washer M6                   |             |

## Hopper and body

### Hopper pivot pins and bushes

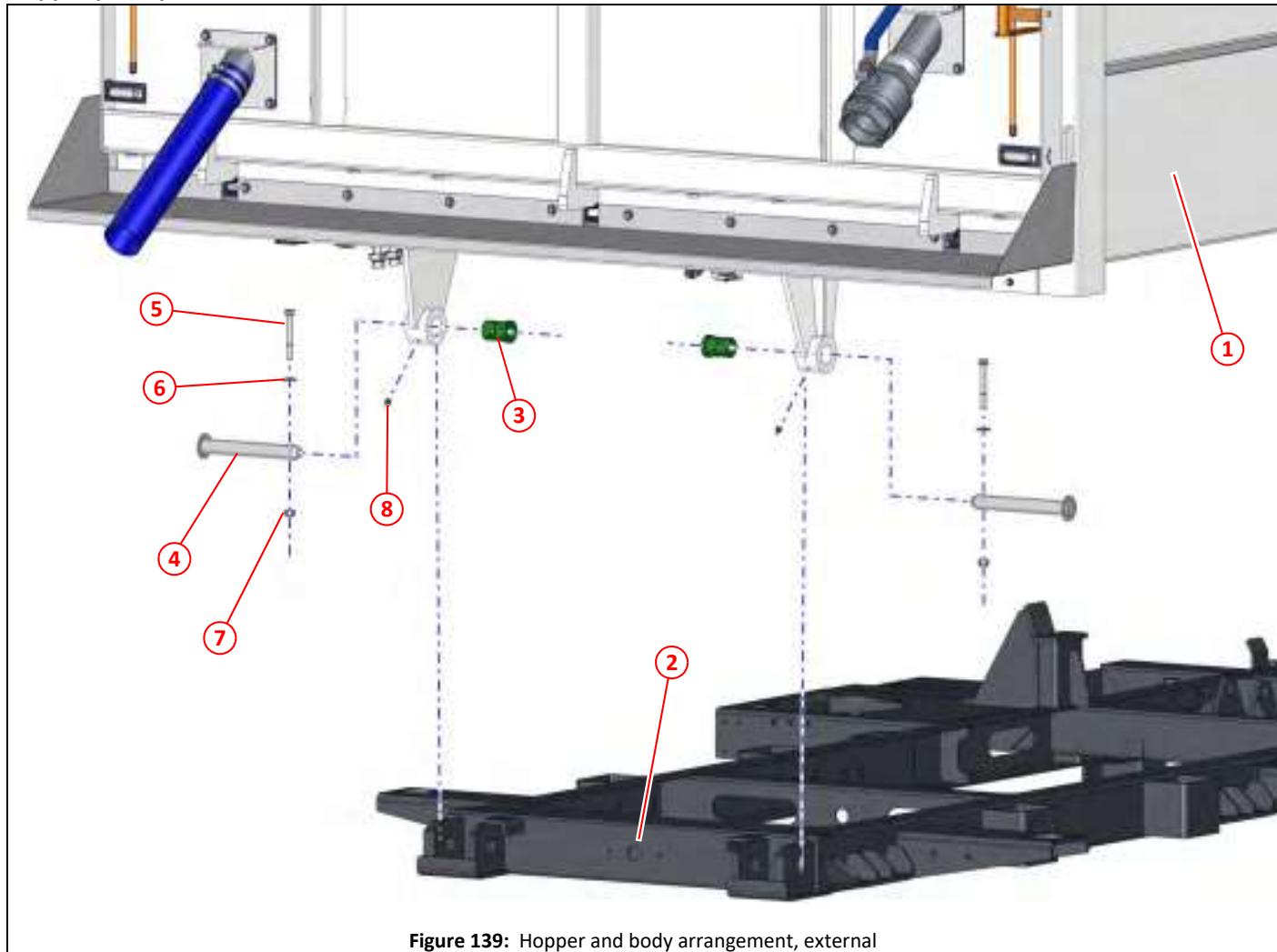
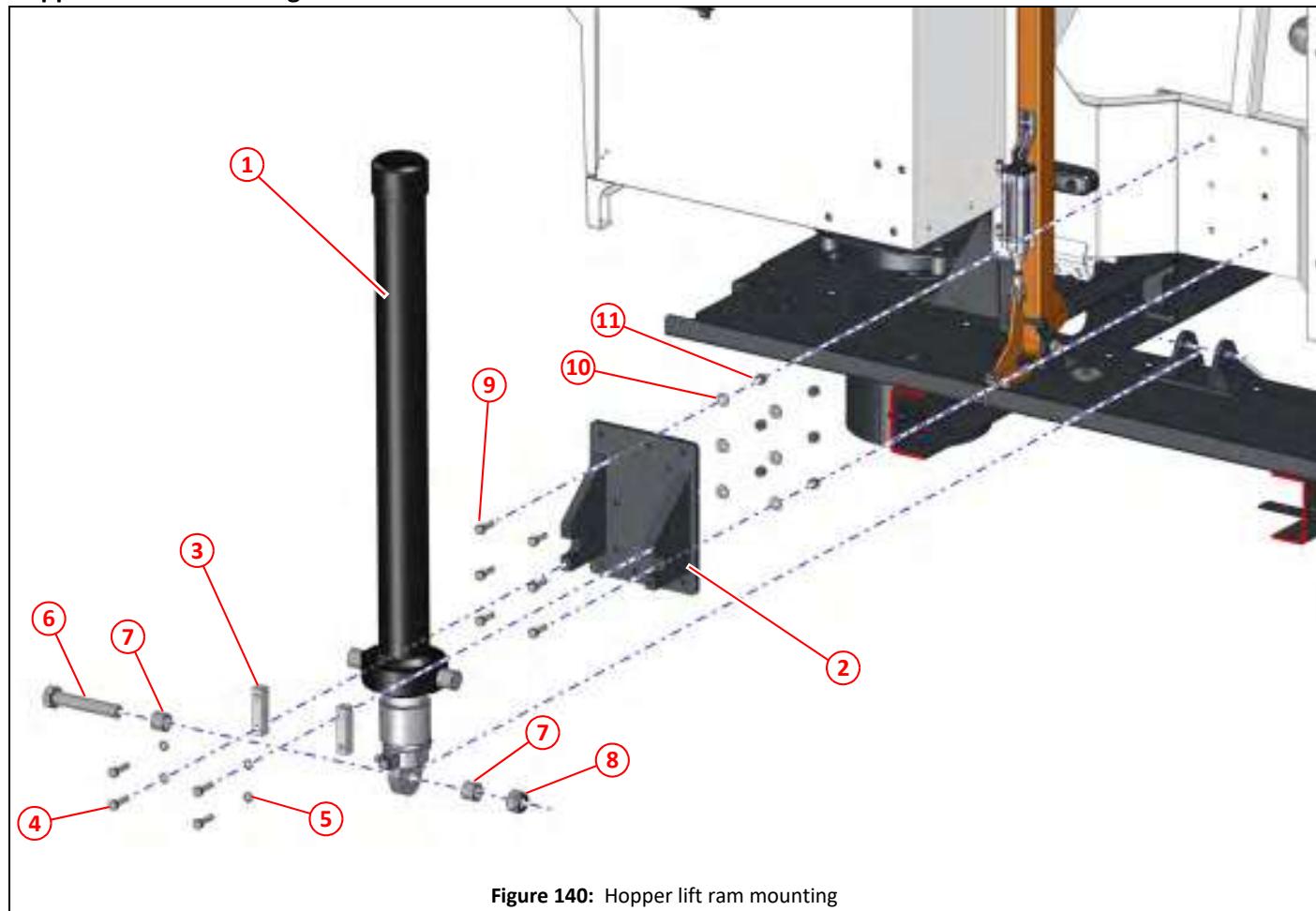


Figure 139: Hopper and body arrangement, external

| Item | Part No | Qty | Description                                  |             |
|------|---------|-----|--|-------------|
| ①    | 046911  | 1   | Hopper, welded                               | 162,163,164 |
| ②    | 042942  | 1   | Subframe                                     |             |
| ③    | 020336  | 2   | Bush   |             |
| ④    | 034391  | 2   | Pivot, hopper                                |             |
| ⑤    | 000139  | 2   | Bolt M12 x 90 (10.9)                         |             |
| ⑥    | 011096  | 2   | Washer M12                                   |             |
| ⑦    | 011077  | 2   | Nyloc nut T M12                              |             |
| ⑧    | 010903  | 2   | Grease nipple, straight, $\frac{1}{8}$ " BSP |             |

**Hopper lift ram mounting**


| Item | Part No | Qty | Description                   |     |
|------|---------|-----|-------------------------------|-----|
| ①    | 024249  | 1   | Ram, dual acting, hopper lift | 286 |
| ②    | 010719  | 1   | Pivot, hopper lift ram        |     |
| ③    | 034395  | 2   | Pivot bar, hopper lift ram    |     |
| ④    | 011034  | 4   | Setscrew M10 x 40             |     |
| ⑤    | 011095  | 4   | Spring washer M10             |     |
| ⑥    | 000241  | 1   | Bolt HT M24 x 130             |     |
| ⑦    | 013714  | 2   | Spacer, hopper lift ram       |     |
| ⑧    | 000008  | 1   | Nyloc nut T M24               |     |
| ⑨    | 011033  | 6   | Setscrew HT M10 x 35          |     |
| ⑩    | 011094  | 6   | Washer M10                    |     |
| ⑪    | 011075  | 6   | Nyloc nut T M10               |     |

## Bump stop, hopper safety prop

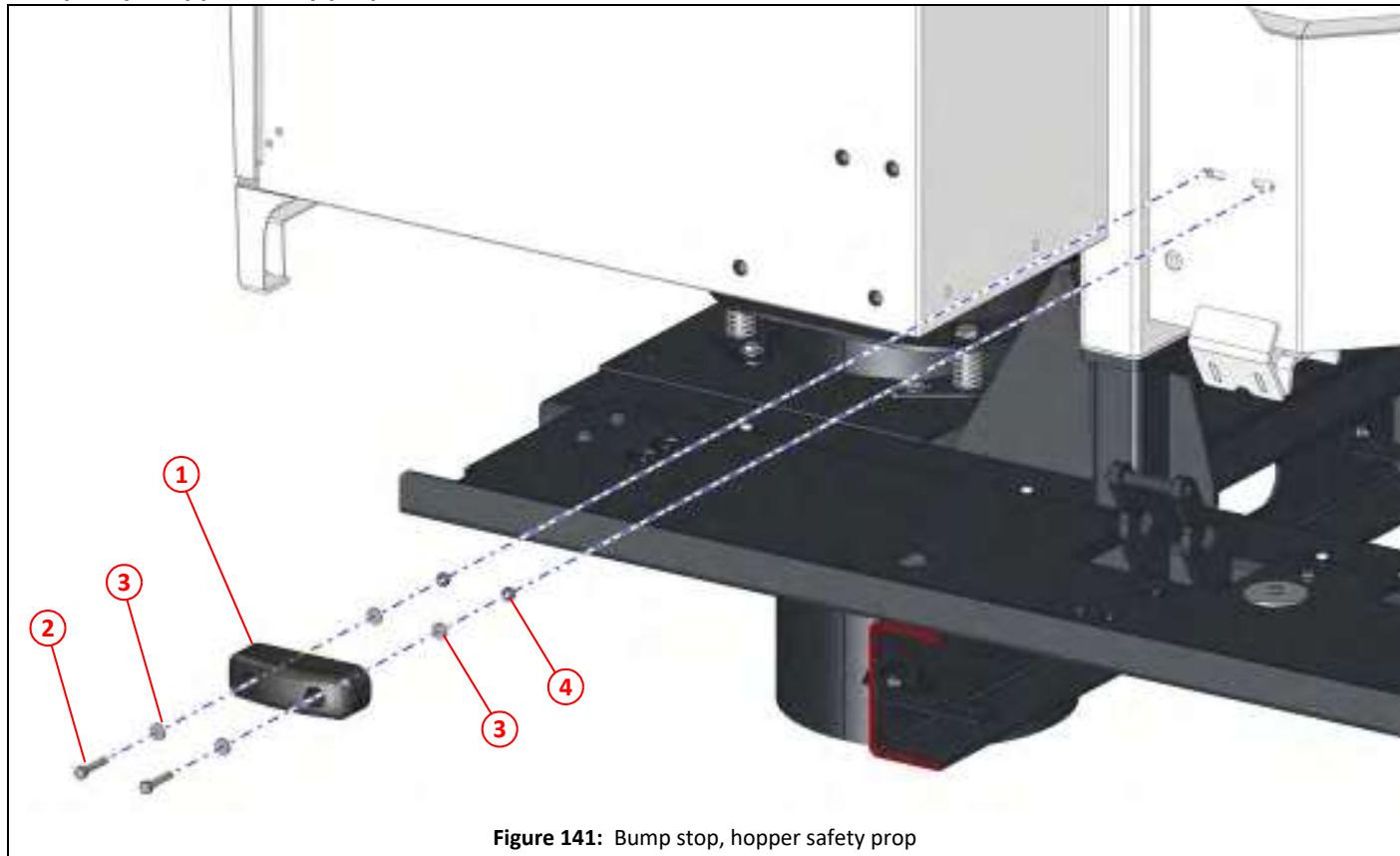
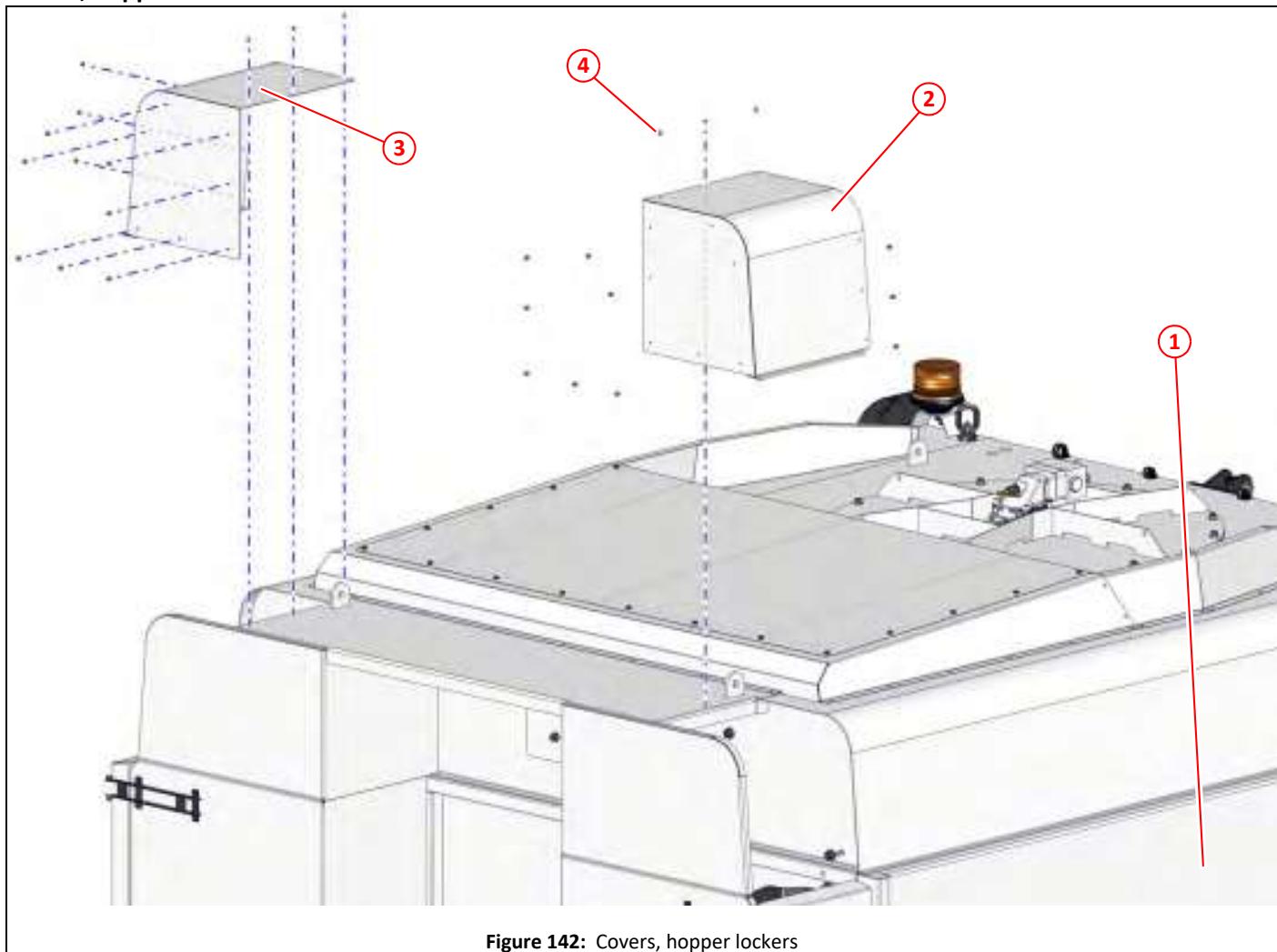


Figure 141: Bump stop, hopper safety prop

| Item | Part No | Qty | Description     |
|------|---------|-----|-----------------|
| ①    | 013466  | 1   | Rubber buffer   |
| ②    | 011068  | 2   | Bolt HT M6 x 35 |
| ③    | 011090  | 4   | Washer M6       |
| ④    | 011071  | 2   | Nyloc nut T M6  |

**Covers, hopper lockers**

**Figure 142:** Covers, hopper lockers

| Item | Part No | Qty | Description                           |             |
|------|---------|-----|---------------------------------------|-------------|
| (1)  | 046911  | 1   | Hopper, welded                        | 162,163,164 |
| (2)  | 044688  | 1   | Cover, hopper locker, left hand side  |             |
| (3)  | 044689  | 1   | Cover, hopper locker, right hand side |             |
| (4)  | 011131  | 26  | Seal blind rivet ø4.8 x 18            |             |

## Locker door, left hand side

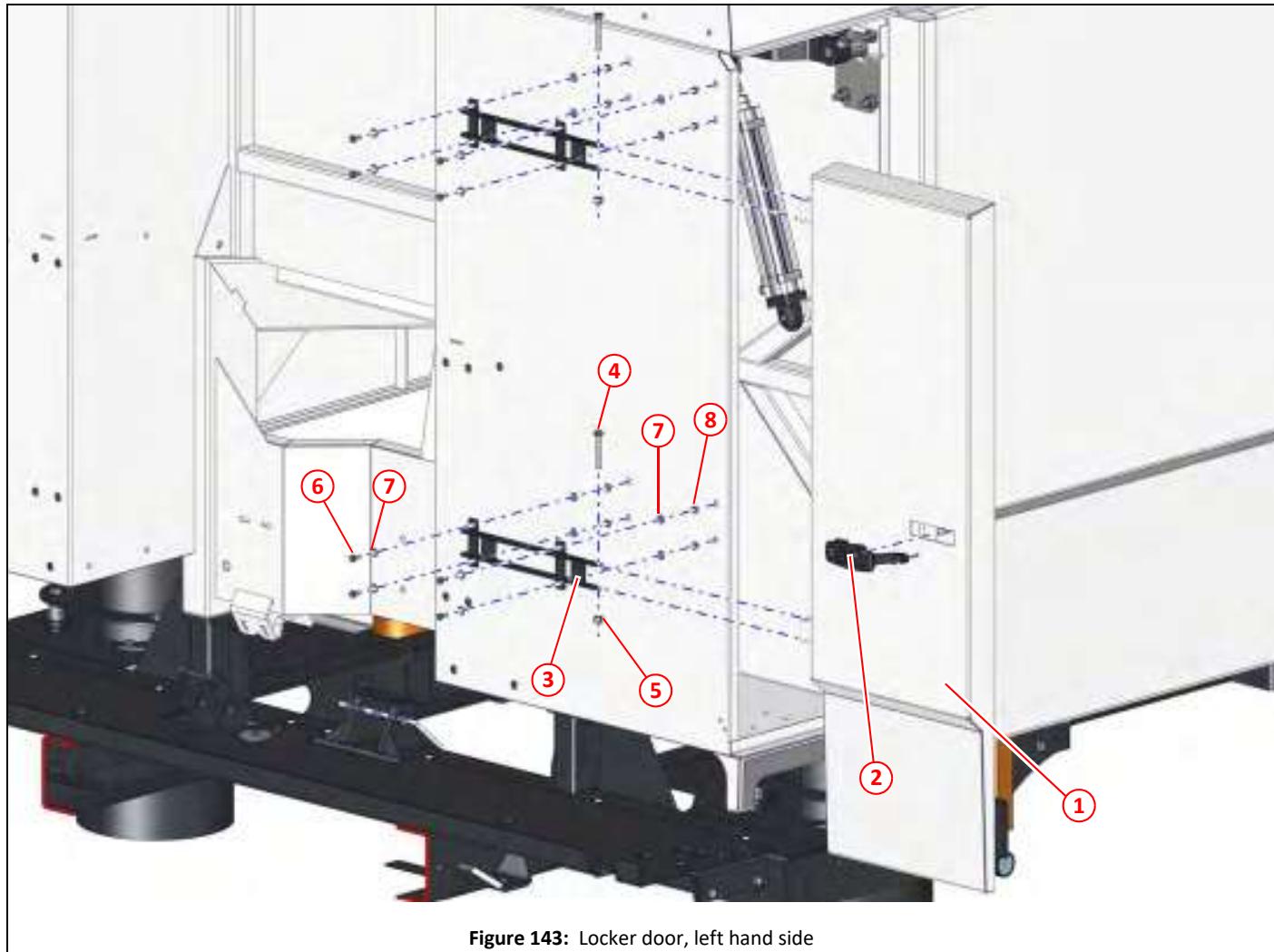


Figure 143: Locker door, left hand side

| Item | Part No | Qty | Description                       |
|------|---------|-----|-----------------------------------|
| ①    | 048550  | 1   | Locker door, left hand side       |
| ②    | 033115  | 1   | Latch, locking, flush compression |
| ③    | 048040  | 2   | Hinge, locker door                |
| ④    | 000261  | 2   | Bolt M8 x 55, stainless steel     |
| ⑤    | 000263  | 2   | Nyloc nut T M8, stainless steel   |
| ⑥    | 000250  | 8   | Setscrew M6 x 16, stainless steel |
| ⑦    | 000254  | 16  | Washer M6, stainless steel        |
| ⑧    | 000253  | 8   | Nyloc nut T M6, stainless steel   |

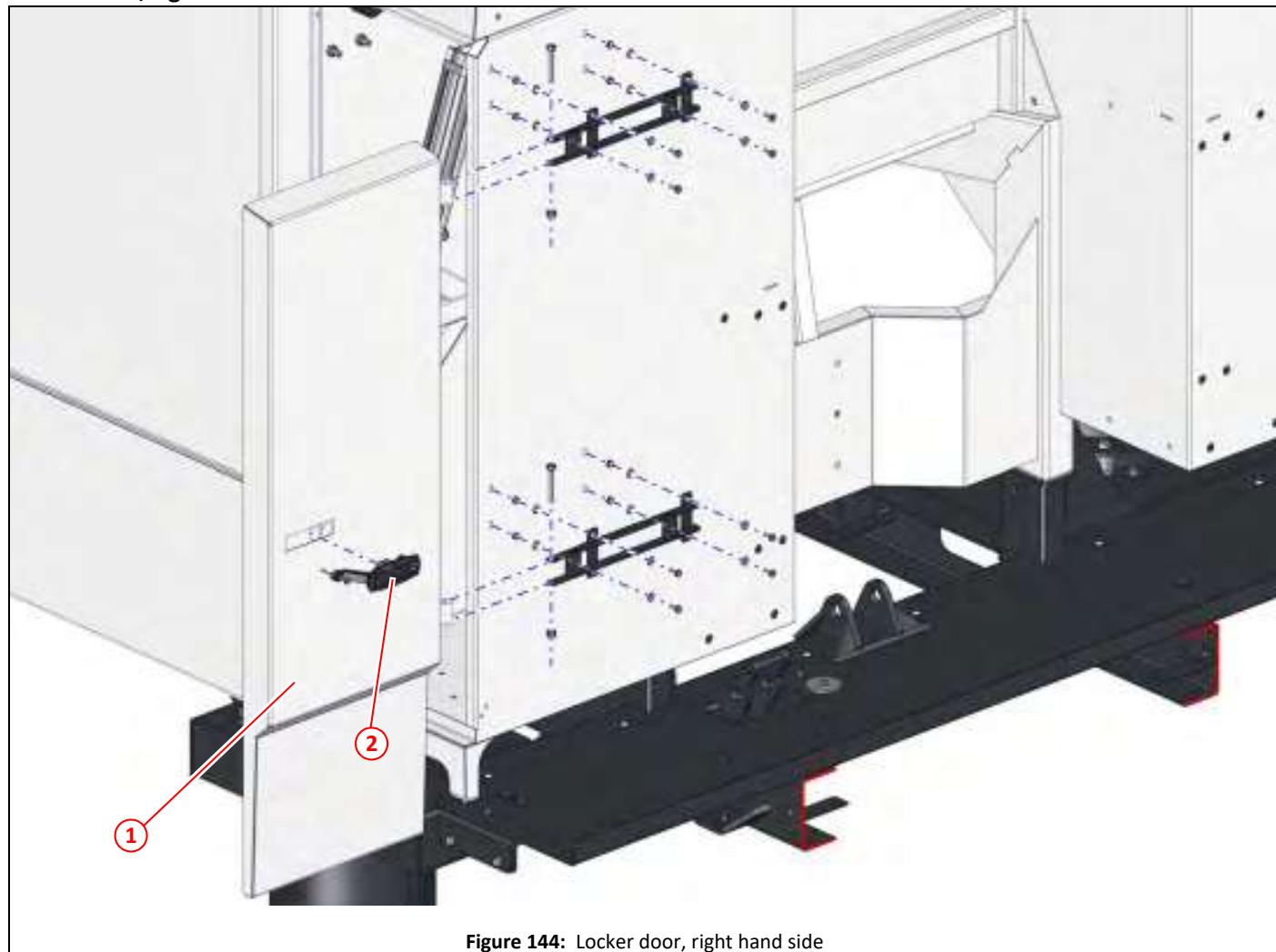
**Locker door, right hand side**


Figure 144: Locker door, right hand side

| Item | Part No | Qty | Description                       |
|------|---------|-----|-----------------------------------|
| ①    | 048551  | 1   | Locker door, right hand side      |
| ②    | 033115  | 1   | Latch, locking, flush compression |
| ③    | 048040  | 2   | Hinge, locker door                |
| ④    | 000261  | 2   | Bolt M8 x 55, stainless steel     |
| ⑤    | 000263  | 2   | Nyloc nut T M8, stainless steel   |
| ⑥    | 000250  | 8   | Setscrew M6 x 16, stainless steel |
| ⑦    | 000254  | 16  | Washer M6, stainless steel        |
| ⑧    | 000253  | 8   | Nyloc nut T M6, stainless steel   |

## Hopper and body

### Hopper access hatch, left hand side

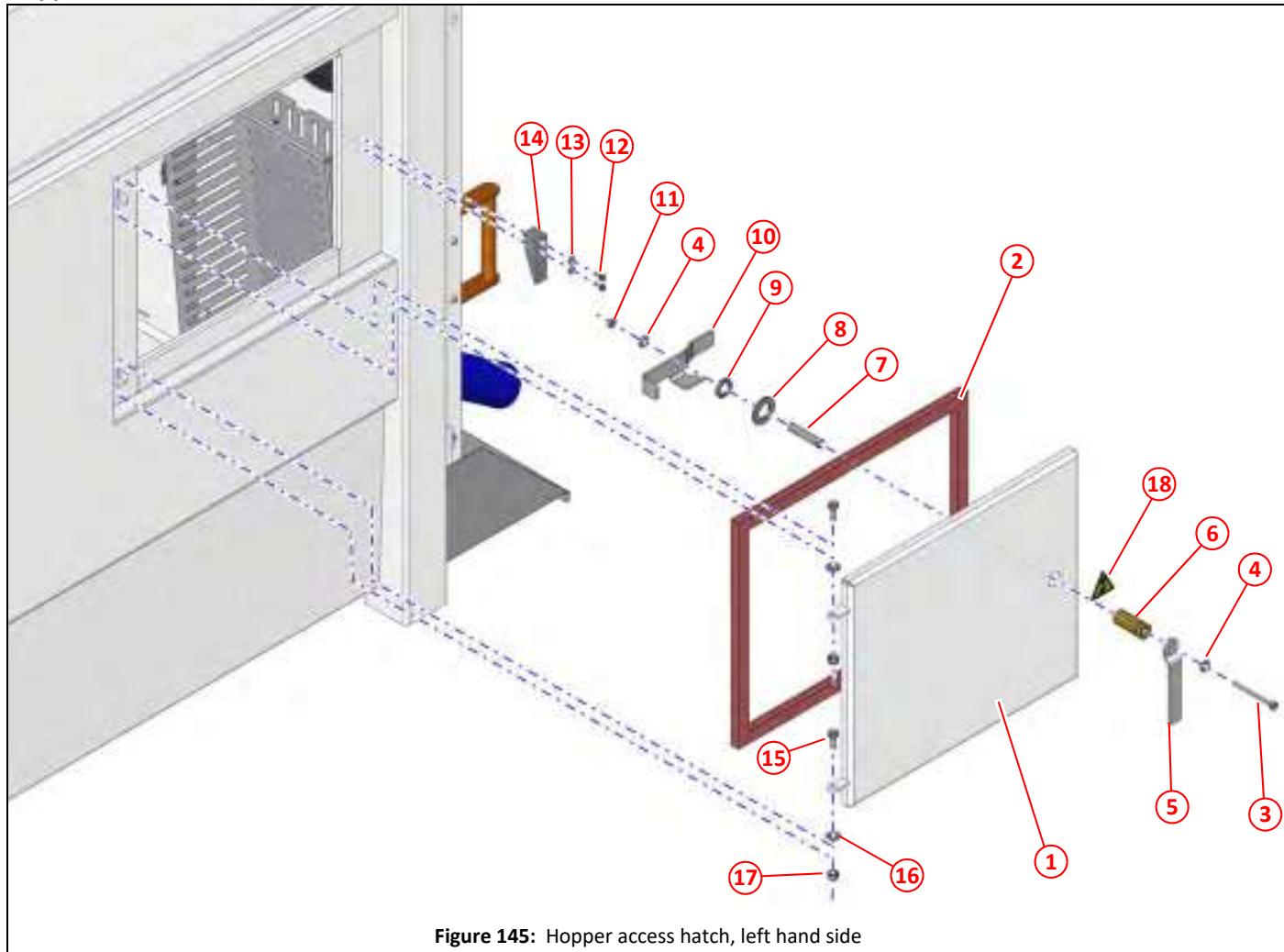
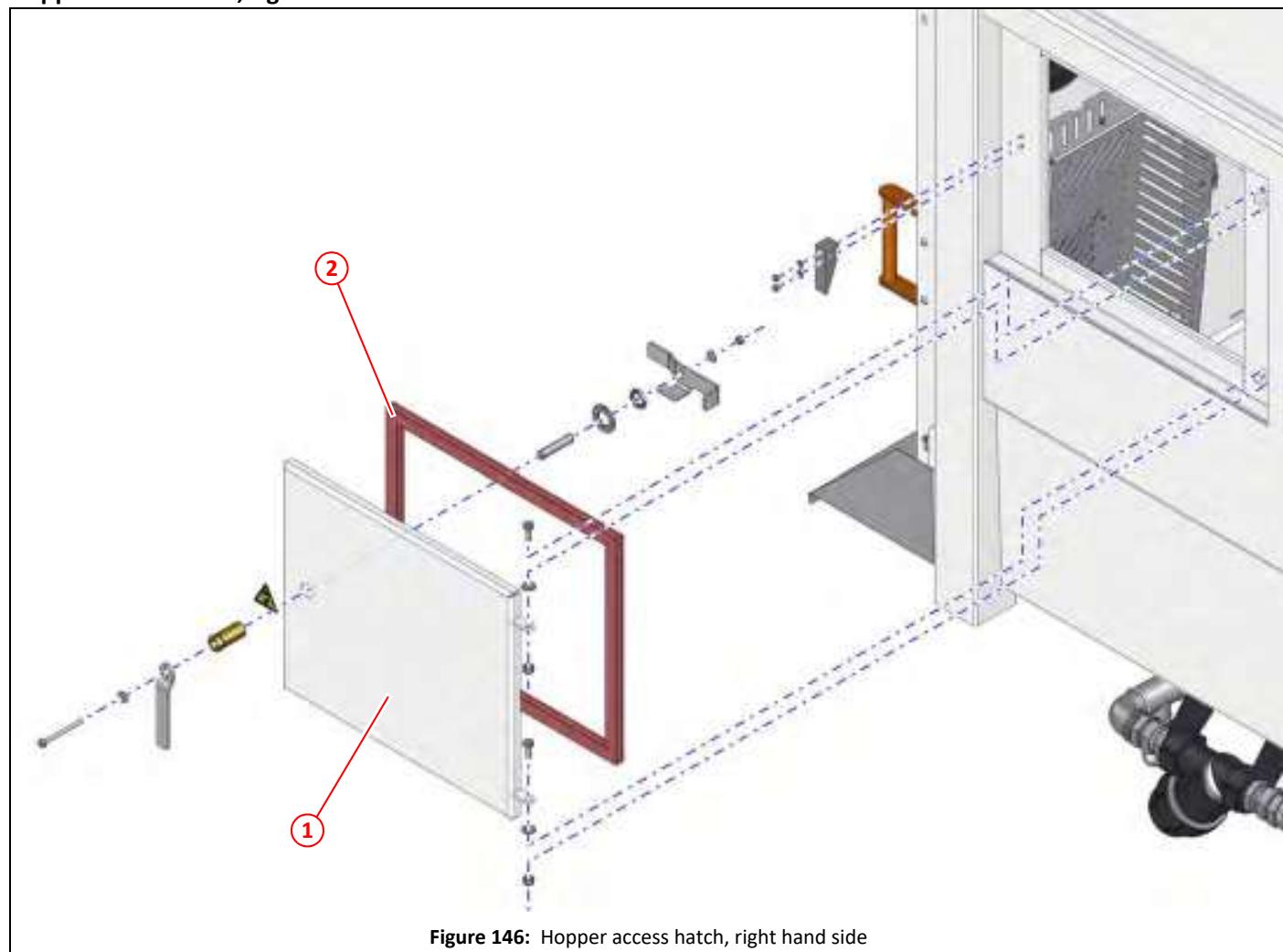


Figure 145: Hopper access hatch, left hand side

| Item | Part No | Qty | Description                       |
|------|---------|-----|-----------------------------------|
| ①    | 036363  | 1   | Access hatch, hopper side         |
| ②    | 013599  | 1   | Seal                              |
| ③    | 011019  | 1   | Bolt M8 x 90                      |
| ④    | 011092  | 2   | Washer M8                         |
| ⑤    | 027933  | 1   | Door handle                       |
| ⑥    | 027935  | 1   | Door catch bearing                |
| ⑦    | 027934  | 1   | Door catch spindle                |
| ⑧    | 000121  | 1   | Washer M27                        |
| ⑨    | 027937  | 1   | Backnut $\frac{3}{4}$ " BSP       |
| ⑩    | 040033  | 1   | Door catch with stop, left hand   |
| ⑪    | 011073  | 1   | Nyloc nut T M8                    |
| ⑫    | 000250  | 2   | Setscrew M6 x 16, stainless steel |
| ⑬    | 000254  | 2   | Washer M6, stainless steel        |
| ⑭    | 027932  | 1   | Door striker                      |
| ⑮    | 011031  | 2   | Setscrew HT M10 x 25              |
| ⑯    | 011094  | 2   | Washer M10                        |
| ⑰    | 011075  | 2   | Nyloc nut T M10                   |
| ⑱    | 039550  | 1   | Label - Warning debris falling    |

**Hopper access hatch, right hand side**


| Item | Part No | Qty | Description                       |
|------|---------|-----|-----------------------------------|
| ①    | 036363  | 1   | Access hatch, hopper side         |
| ②    | 013599  | 1   | Seal                              |
| ③    | 011019  | 1   | Bolt M8 x 90                      |
| ④    | 011092  | 2   | Washer M8                         |
| ⑤    | 027933  | 1   | Door handle                       |
| ⑥    | 027935  | 1   | Door catch bearing                |
| ⑦    | 027934  | 1   | Door catch spindle                |
| ⑧    | 000121  | 1   | Washer M27                        |
| ⑨    | 027937  | 1   | Backnut $\frac{3}{4}$ " BSP       |
| ⑩    | 040034  | 1   | Door catch with stop, right hand  |
|      | 011073  | 1   | Nyloc nut T M8                    |
|      | 000250  | 2   | Setscrew M6 x 16, stainless steel |
|      | 000254  | 2   | Washer M6, stainless steel        |
|      | 027932  | 1   | Door striker                      |
|      | 011031  | 2   | Setscrew HT M10 x 25              |
|      | 011094  | 2   | Washer M10                        |
|      | 011075  | 2   | Nyloc nut T M10                   |
|      | 039550  | 1   | Label - Warning debris falling    |

## Hopper and body

### Hopper capping, left hand side

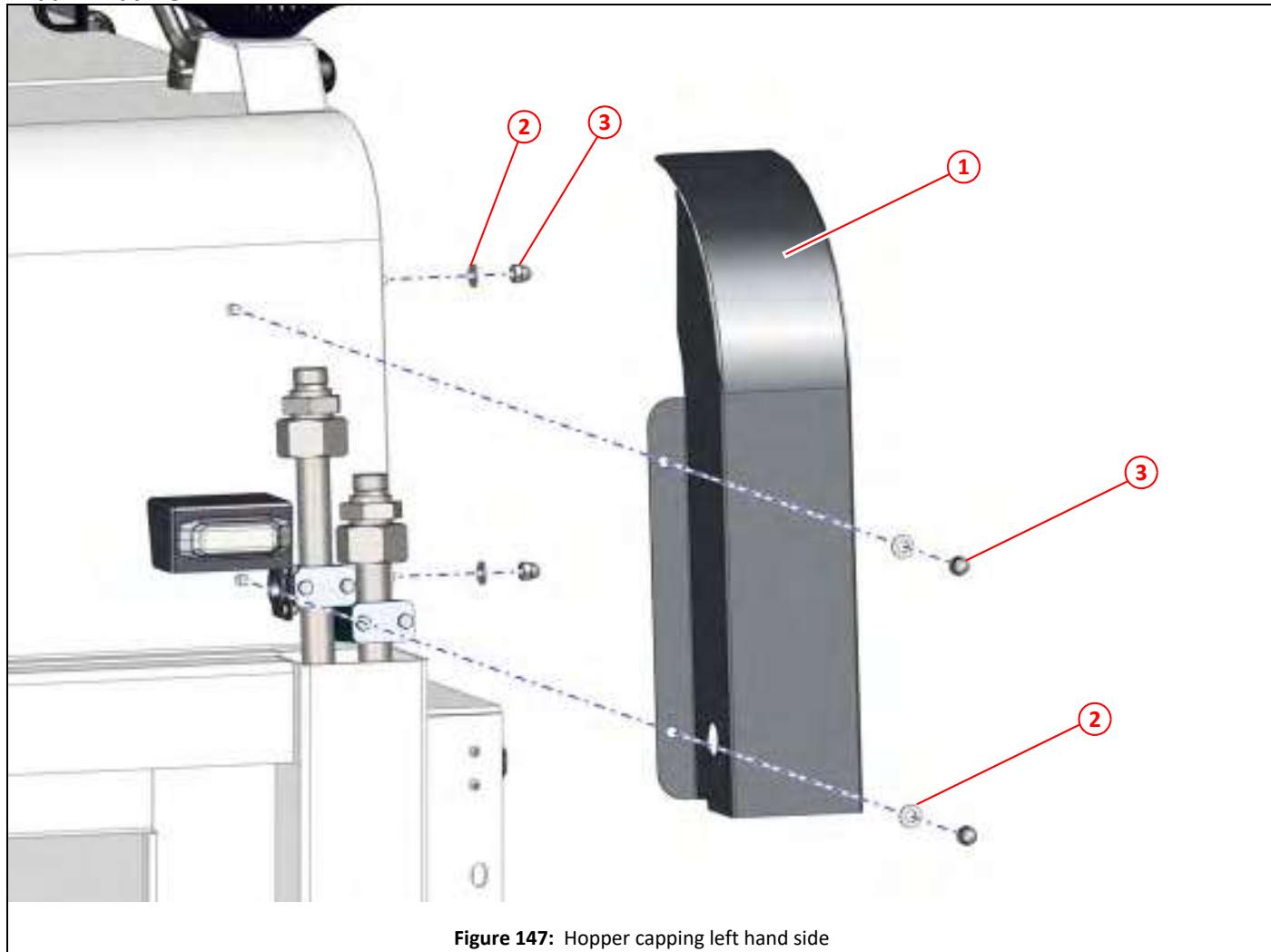
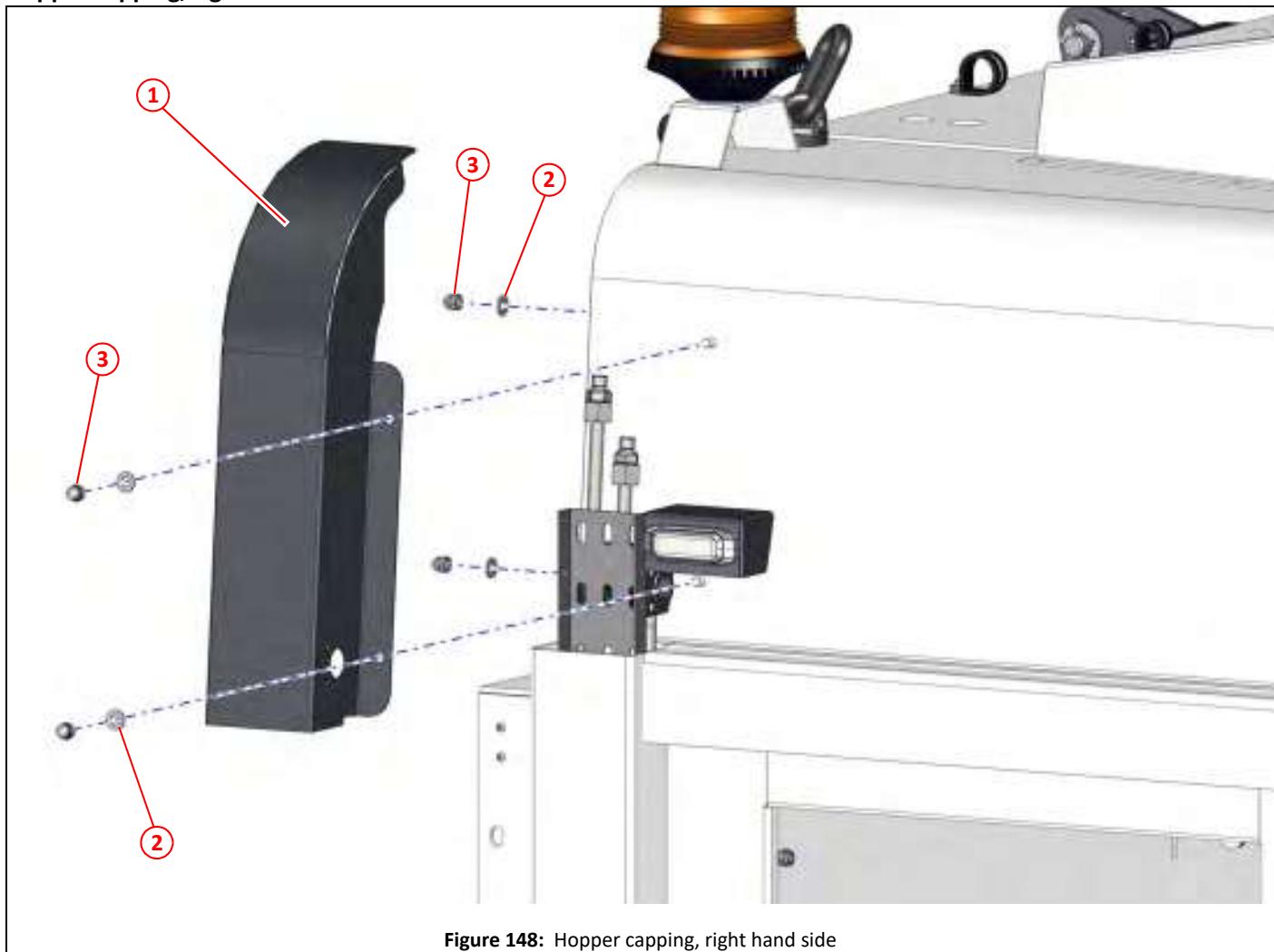


Figure 147: Hopper capping left hand side

| Item | Part No | Qty | Description               |  |
|------|---------|-----|---------------------------|--|
| ①    | 047032  | 1   | Hopper capping, left hand |  |
| ②    | 000419  | 4   | Washer M8 ø17             |  |
| ③    | 000089  | 4   | Dome nut M8               |  |

**Hopper capping, right hand side**


| Item | Part No | Qty | Description                |  |
|------|---------|-----|----------------------------|--|
| ①    | 047033  | 1   | Hopper capping, right hand |  |
| ②    | 000419  | 4   | Washer M8 ø17              |  |
| ③    | 000089  | 4   | Dome nut M8                |  |

## Hopper and body

### Hopper LED beacons and rear LED marker lights

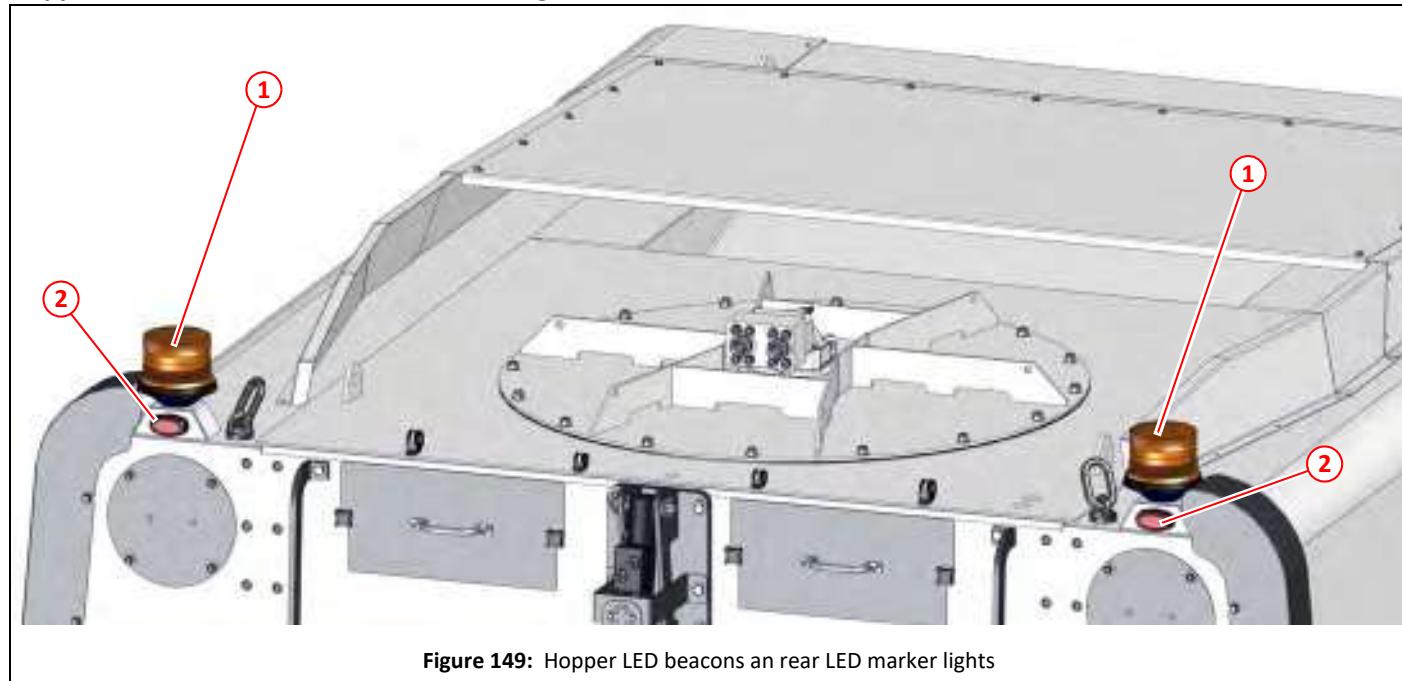
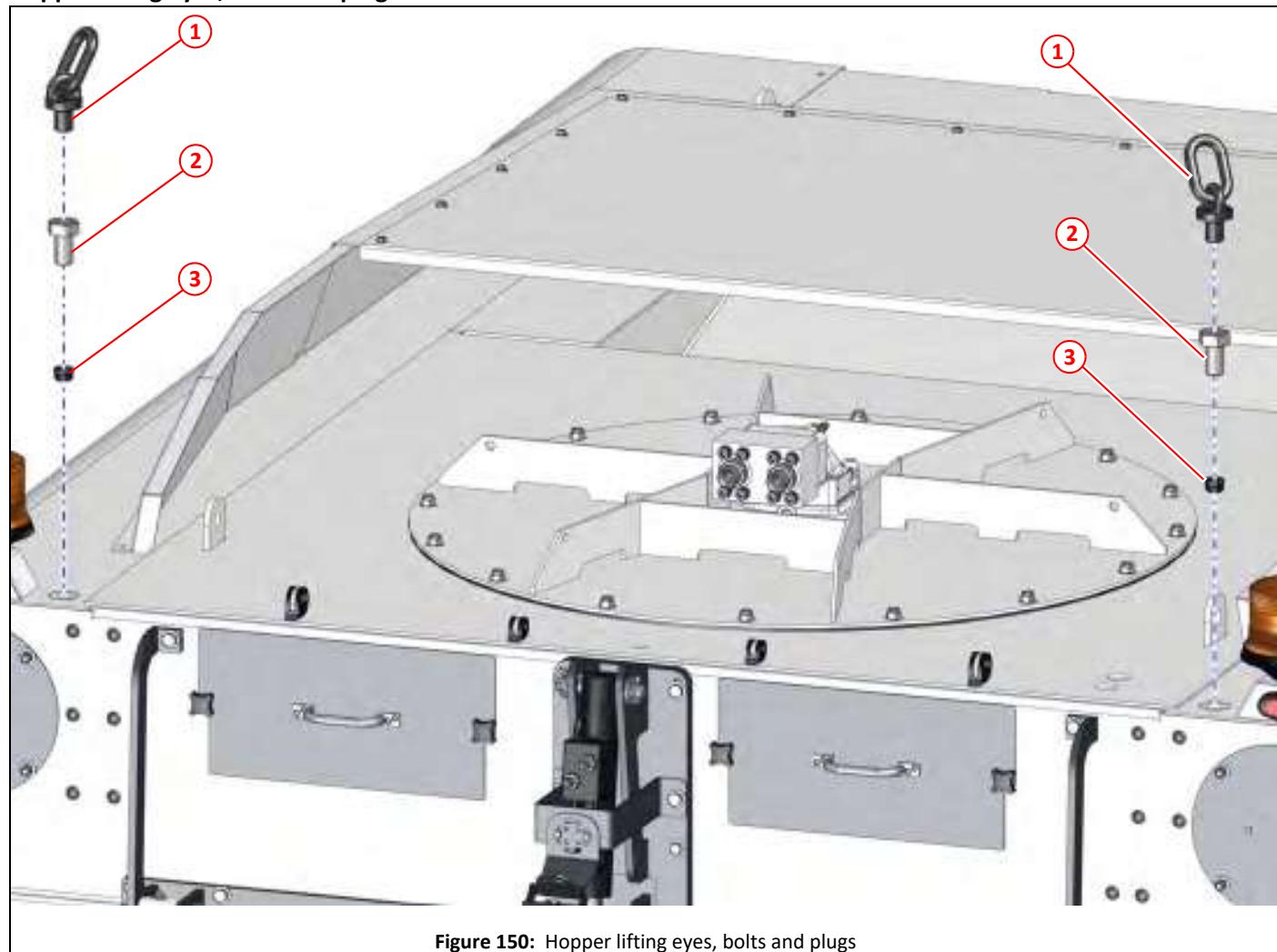


Figure 149: Hopper LED beacons and rear LED marker lights

| Item | Part No | Qty | Description                            |
|------|---------|-----|--|
| ①    | 046659  | 1   | LED beacon, single bolt fixing, 10-30V |
| ②    | 040727  | 1   | Wiring loom for twin beacons           |
| ③    | 030773  | 2   | LED marker light, 12V/24V              |

**Hopper lifting eyes, bolts and plugs**


| Item | Part No | Qty | Description                                     |
|------|---------|-----|---|
| (1)  | 035941  | 2   | Linked eye bolt M24, 1.6T                       |
| (2)  | 000430  | 2   | Screw M24 x 40, for attaching lifting equipment |
| (3)  | 026173  | 2   | Plastic plug                                    |

## Hose fixing clips, hopper

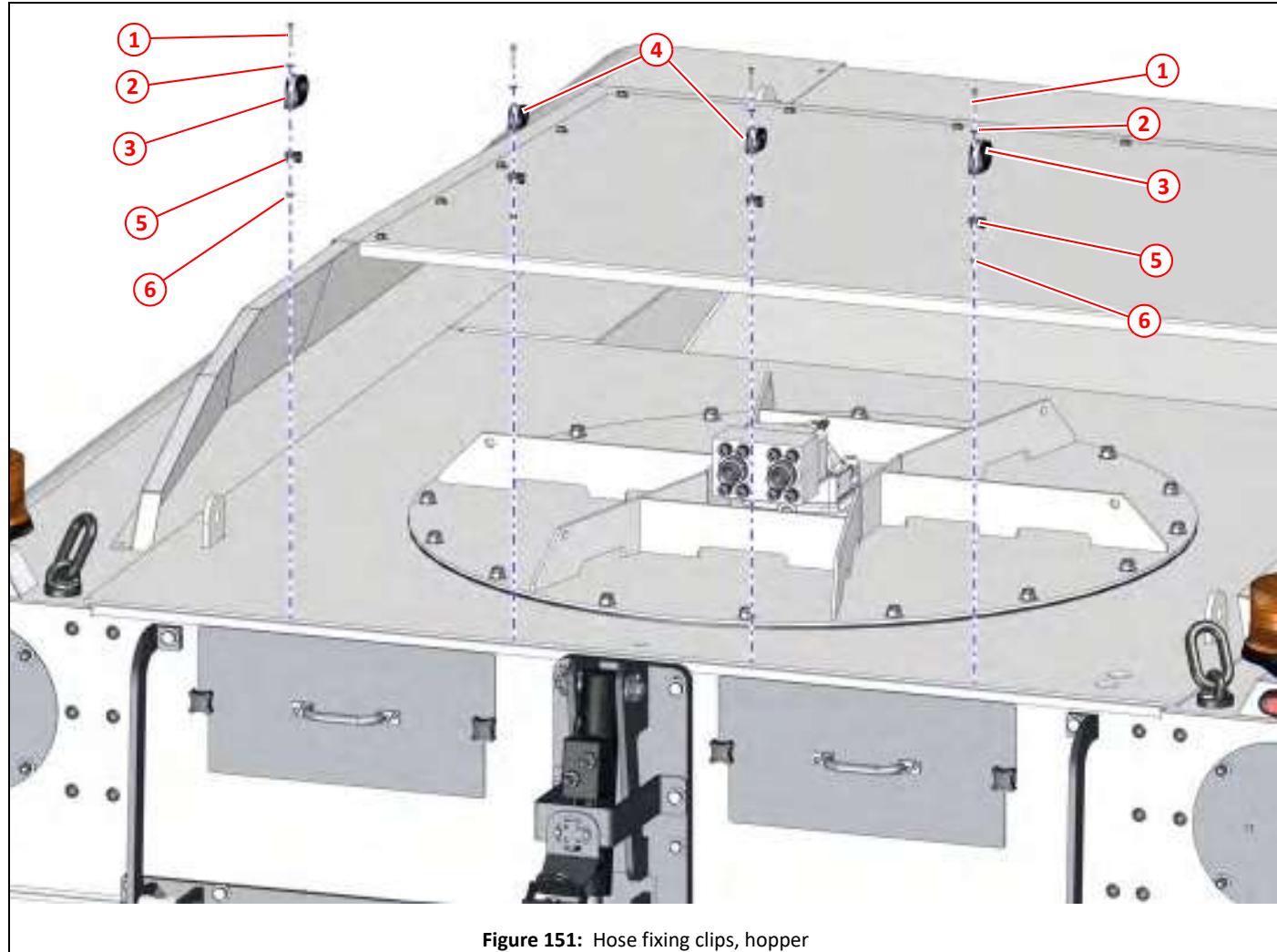
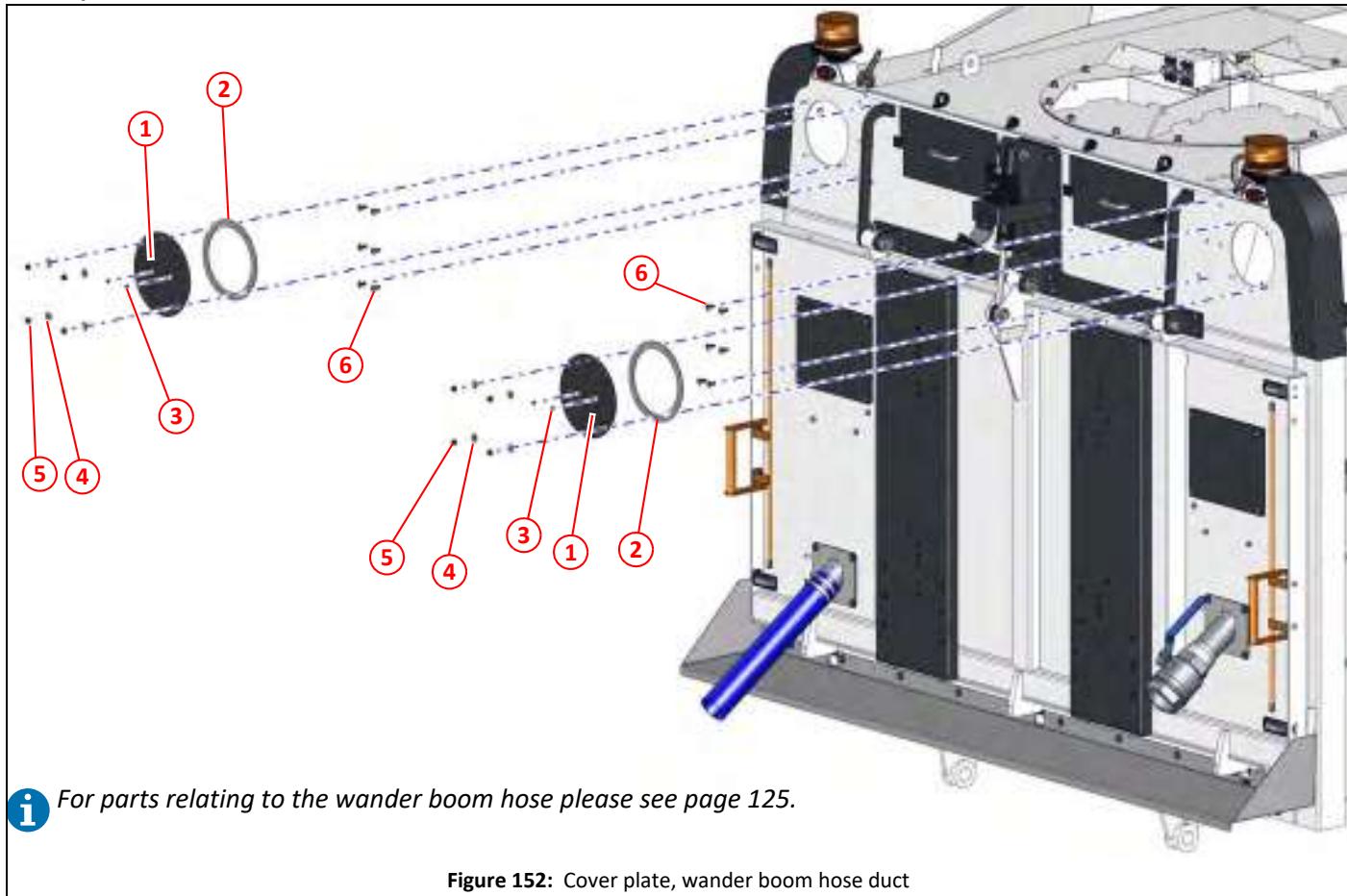


Figure 151: Hose fixing clips, hopper

| Item | Part No  | Qty | Description                           |
|------|----------|-----|---------------------------------------|
| ①    | 000191   | 4   | Socket cap head screw M4 x 25, plated |
| ②    | 000410   | 4   | Washer M5                             |
| ③    | 024705   | 2   | Clip ø35                              |
| ④    | 005059   | 2   | Clip ø22                              |
| ⑤    | 021914 * | 4   | Clip ø12                              |
| ⑥    | 000134 * | 4   | Nyloc nut T M4                        |

\*. These fittings are actually on the inside of the hopper, accessible via the fan access cover plates.

**Cover plate, wander boom hose duct**

**Figure 152:** Cover plate, wander boom hose duct

| Item | Part No  | Qty | Description                          |
|------|----------|-----|--------------------------------------|
| ①    | 025486 * | 2   | Cover plate, wander hose duct        |
| ②    | 013645   | 2   | Inseal strip, cut length as required |
| ③    | 044263   | 4   | Blanking grommet Ø5                  |
| ④    | 011092   | 8   | Washer M8                            |
| ⑤    | 011073   | 8   | Nyloc nut T M8                       |
| ⑥    | 014563 † | 12  | Fir tree button                      |

\*. Only 1 fitted if wander boom fitted.

†. Only fitted if no wander boom.

## Hopper and body

### Fan inspection covers, external

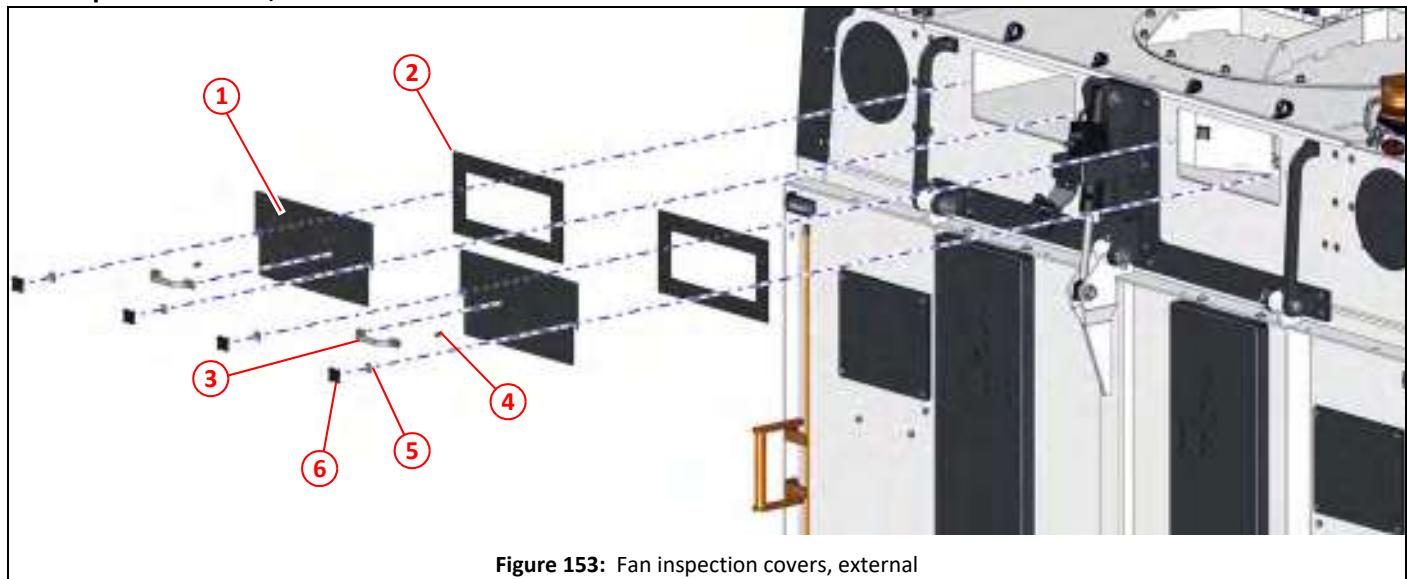
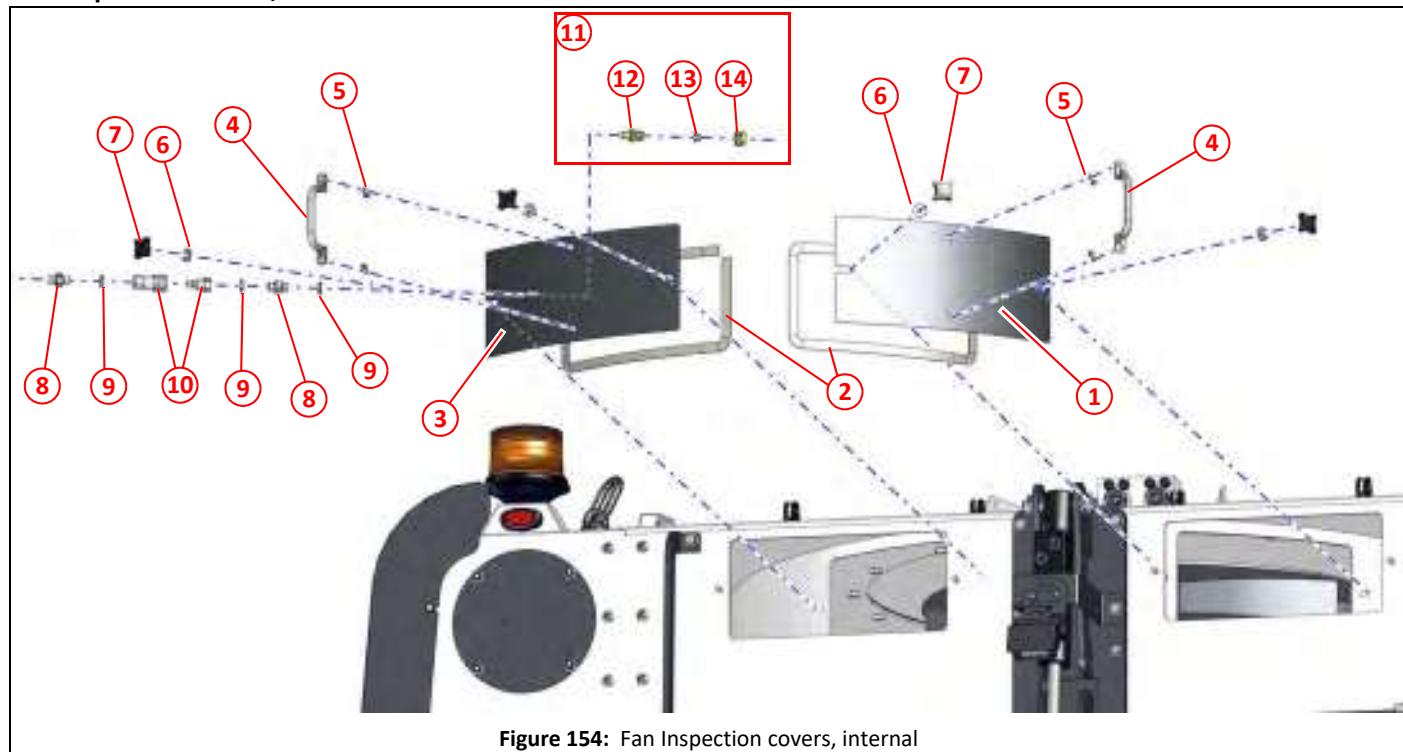


Figure 153: Fan inspection covers, external

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 030728  | 2   | Cover plate, quick release, fan inspection, rear panel |
| ②    | 010546  | 2   | Inseal strip, cut length as required                   |
| ③    | 010502  | 2   | Pull handle  |
| ④    | 011124  | 8   | Blind rivet ø4.0 x 10                                  |
| ⑤    | 000264  | 4   | Washer M8, stainless steel                             |
| ⑥    | 000248  | 4   | Grip nut M8  |

**Fan inspection covers, internal**

**Figure 154: Fan Inspection covers, internal**

| Item | Part No  | Qty | Description   |
|------|----------|-----|---|
| ①    | 030730 * | 1   | Cover plate, quick release, fan inspection, internal      |
| ②    | 005020   | 2   | Sealing strip, expanding, 25 x 15, cut to required length |
| ③    | 030731 † | 1   | Cover plate, quick release, fan wash assist               |
| ④    | 010502   | 2   | Pull handle   |
| ⑤    | 011124   | 8   | Blind rivet ø4.0 x 10                                     |
| ⑥    | 000264   | 4   | Washer M8, stainless steel                                |
| ⑦    | 000248   | 4   | Grip nut M8   |
| ⑧    | 011158   | 2   | Adapter $\frac{1}{4}$ " BSP                               |
| ⑨    | 011152   | 3   | Dowty seal $\frac{1}{4}$ " BSP                            |
| ⑩    | 012985   | 1   | Quick release coupling, $\frac{1}{4}$ " BSP               |
| ⑪    | 030507   | 1   | Spray jet assembly LF6-80, includes items d, f, and g     |
| ⑫    | 010112   | 1   | Nozzle body   |
| ⑬    | 012926   | 1   | Spray jet TPU-8006  |
| ⑭    | 030951   | 1   | Nozzle cap  |

\*. Two will be used if the fan wash assist is not fitted.

†. Only used when fan wash assist is fitted.

## Hopper rear door arrangement

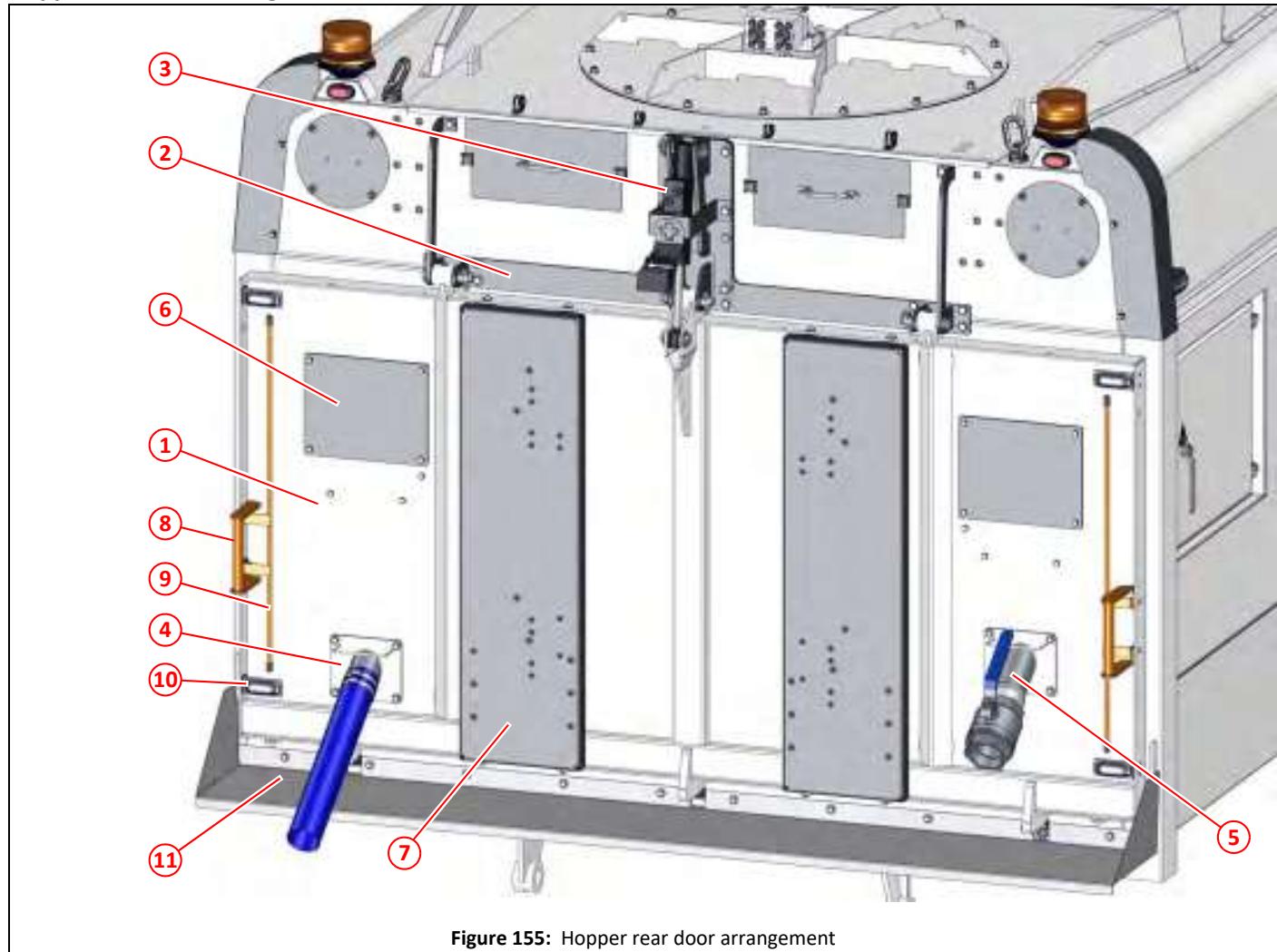
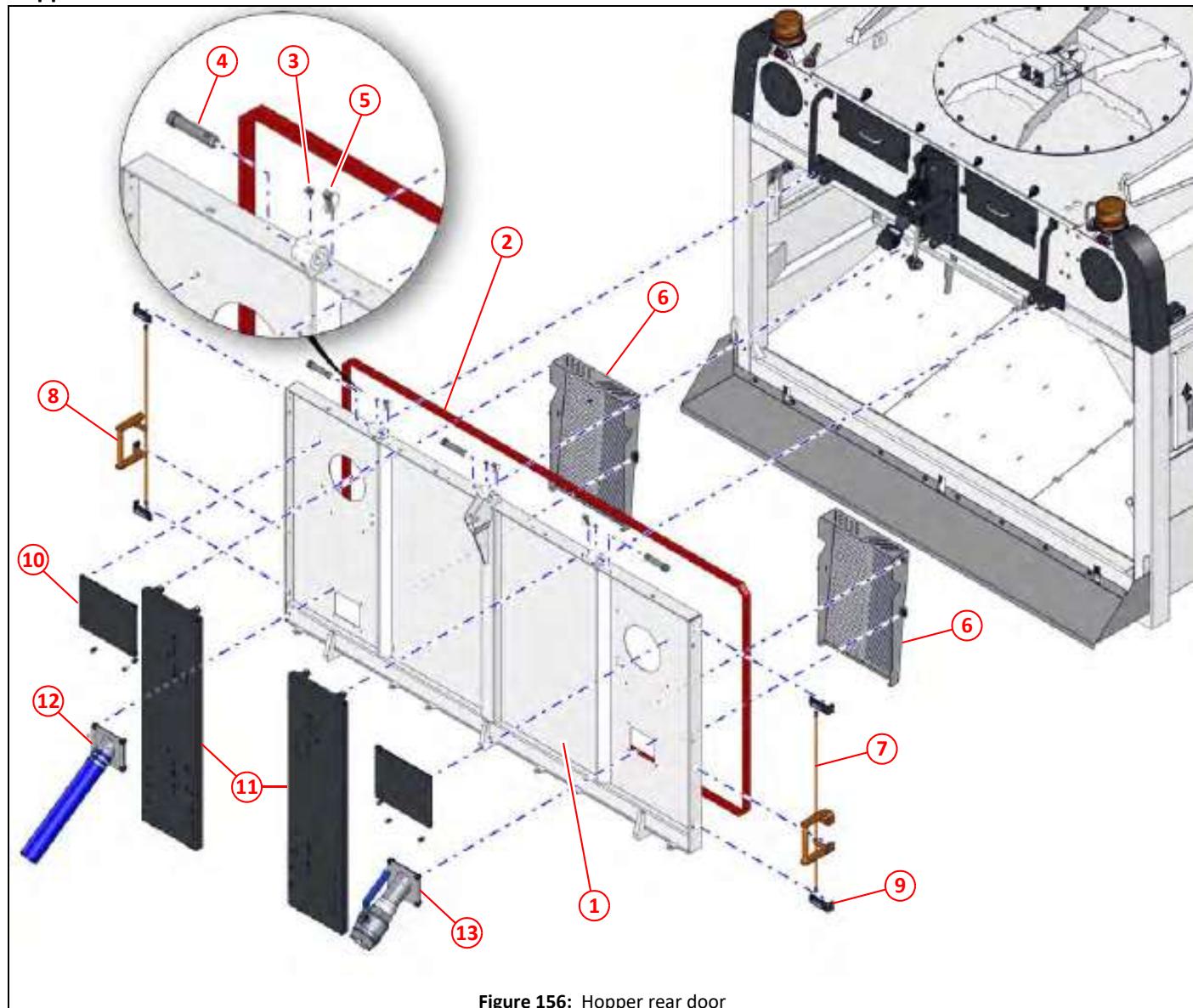


Figure 155: Hopper rear door arrangement

| Item | Part No | Qty | Description                         |     |
|------|---------|-----|-------------------------------------|-----|
| ①    |         | 1   | Rear door                           | 183 |
| ②    |         | 1   | Hinge assembly, rear door           |     |
| ③    |         | 1   | Ram, open/close, rear door          |     |
| ④    |         | 1   | Rear strainer outlet                | 189 |
| ⑤    |         | 1   | Rear strainer outlet, with valve    | 190 |
| ⑥    |         | 2   | Wander hose blanking plate          |     |
| ⑦    |         | 2   | Mounting bracket, rear door options |     |
| ⑧    |         | 2   | Grab handle                         | 185 |
| ⑨    |         | 2   | Cable guide, rear door lighting     | 185 |
| ⑩    |         | 4   | LED warning light                   | 186 |
| ⑪    |         | 1   | Hopper chute                        |     |

**Hopper rear door**


| Item | Part No  | Qty | Description                                       |     |
|------|----------|-----|---|-----|
| ①    | 046850   | 1   | Rear door   |     |
| ②    | 030806   | 1   | Seal, circular section, rear door, 6.8m           |     |
| ③    | 010902   | 3   | Grease nipple $\frac{1}{8}$ " BSP, 90°            |     |
| ④    | 013051   | 3   | Hinge pin   |     |
| ⑤    | 013053   | 3   | Lynch pin   |     |
| ⑥    | 047994   | 2   | Strainer assembly, tall, rear door                | 184 |
| ⑦    |          | 2   | Cable guide, rear door lighting                   | 185 |
| ⑧    | 039593   | 2   | Grab handle                                       |     |
| ⑨    | 047979   | 4   | LED warning light, actual quantity as per machine | 186 |
| ⑩    | 047261 * | 2   | Wander hose blanking plate                        |     |
| ⑪    |          | 2   | Mounting bracket, rear door options               |     |
| ⑫    |          | 1   | Rear strainer outlet                              | 189 |
| ⑬    |          | 1   | Rear strainer outlet, with valve                  | 190 |
| ⑭    | 046845   | 1   | Hopper chute                                      |     |
| NI   | 047117   | 1   | Rear door assembly, includes items ①, ②, and ③    |     |

\*. Two required unless wander hose installed on rear door then only one required.

## Hopper and body

### Strainer, tall, rear door

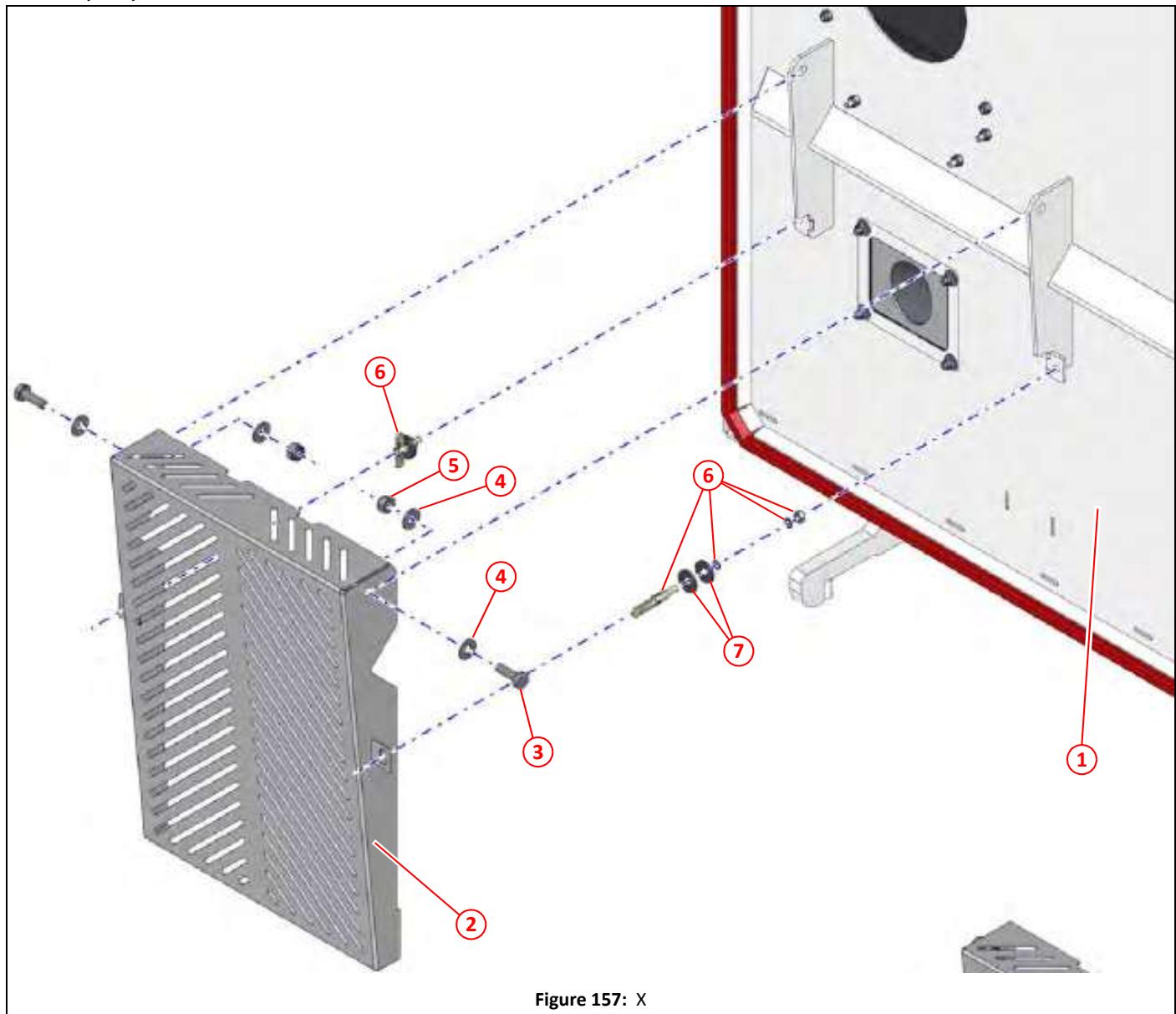
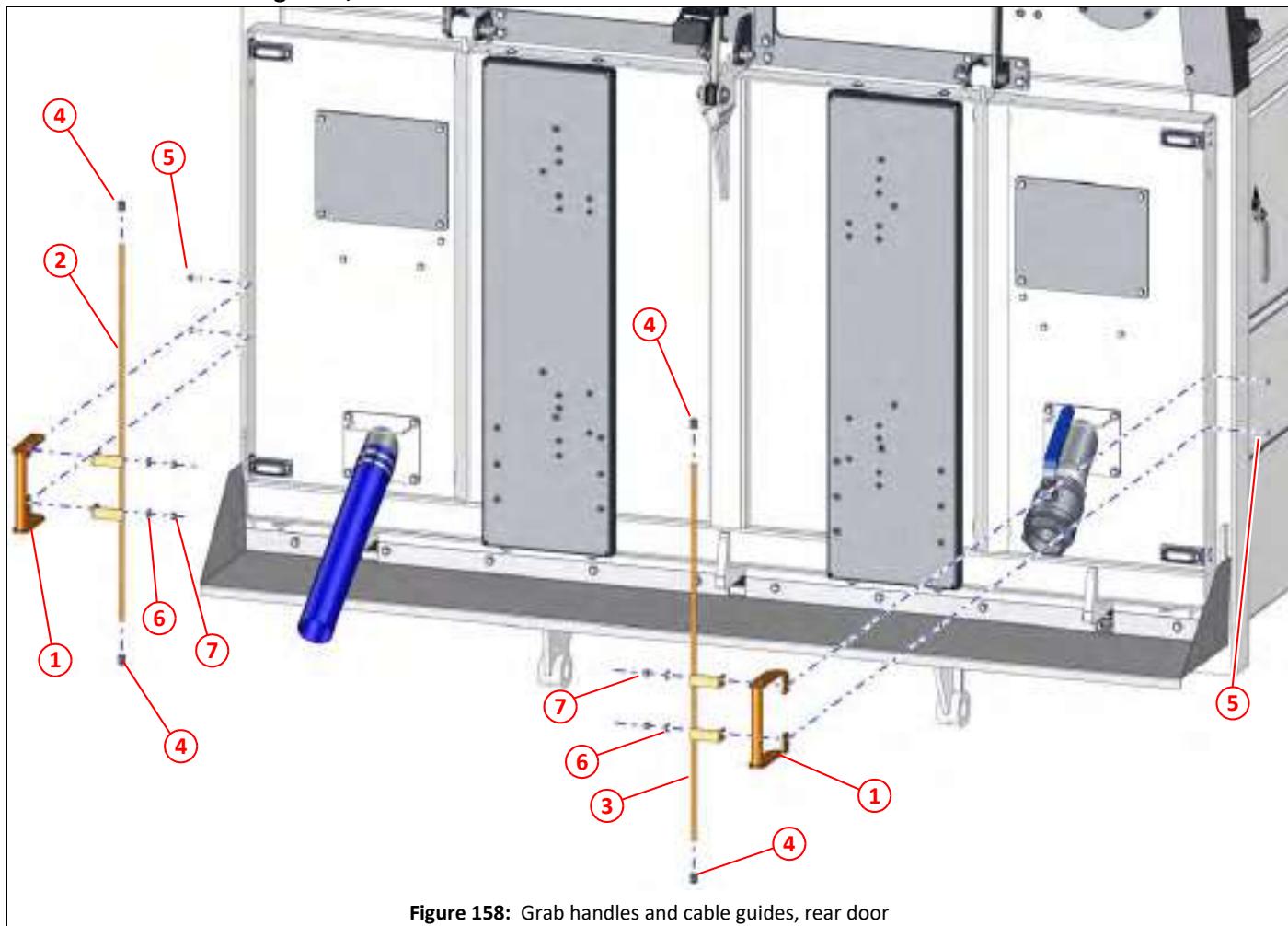


Figure 157: X

| Item | Part No  | Qty | Description   |
|------|----------|-----|---|
| ①    | 047117   | 1   | Rear door assembly  |
| ②    | 047993 * | 1   | Strainer, tall, rear door   |
| ③    | 000285 * | 2   | Setscrew M23 x 35, stainless steel                                    |
| ④    | 000277 * | 4   | Washer M12, stainless steel   |
| ⑤    | 000275 * | 2   | Nyloc nut T M12, stainless steel                                      |
| ⑥    | 012253 * | 2   | Antiluce, small   |
| ⑦    | 021979 * | 4   | Rubber sealing washer $\varnothing 30 \times \varnothing 12 \times 3$ |
| NI   | 047994 * | 1   | Strainer assembly, tall, rear door, includes all items except ①       |

\*. Two required per rear door.

**Grab handles and cable guides, rear door**

**Figure 158:** Grab handles and cable guides, rear door

| Item | Part No | Qty | Description                                       |  |
|------|---------|-----|---|--|
| (1)  | 039593  | 2   | Grab handle                                       |  |
| (2)  | 048241  | 1   | Cable guide, rear door light, left hand           |  |
| (3)  | 048240  | 1   | Cable guide, rear door light, right hand          |  |
| (4)  | 043065  | 4   | Pipe cap ø12                                      |  |
| (5)  | 000281  | 4   | Socket button head screw M8 x 25, stainless steel |  |
| (6)  | 000264  | 4   | Washer M8, stainless steel                        |  |
| (7)  | 000263  | 4   | Nyloc nut T M8, stainless steel                   |  |

## Warning lights, rear door

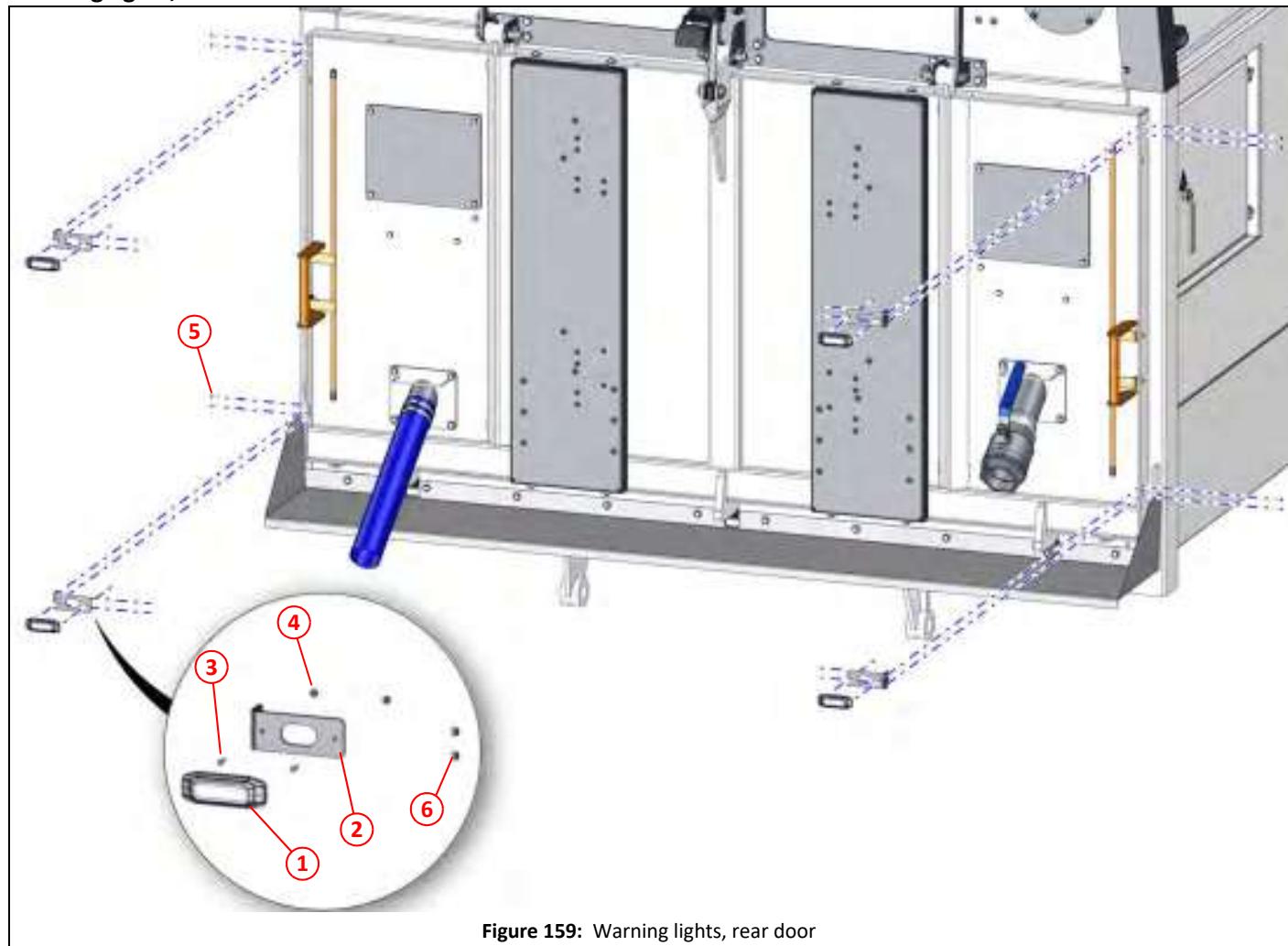
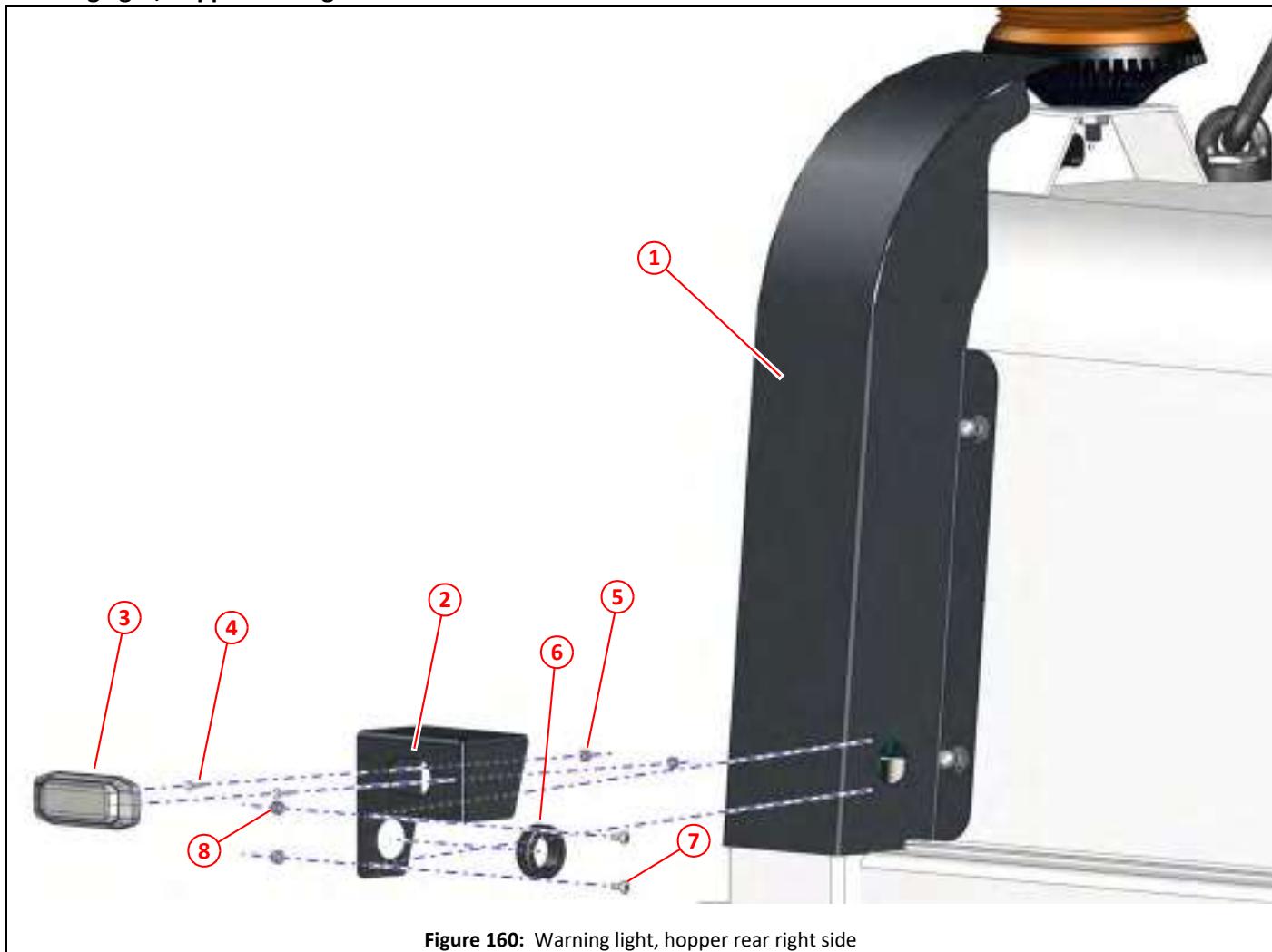


Figure 159: Warning lights, rear door

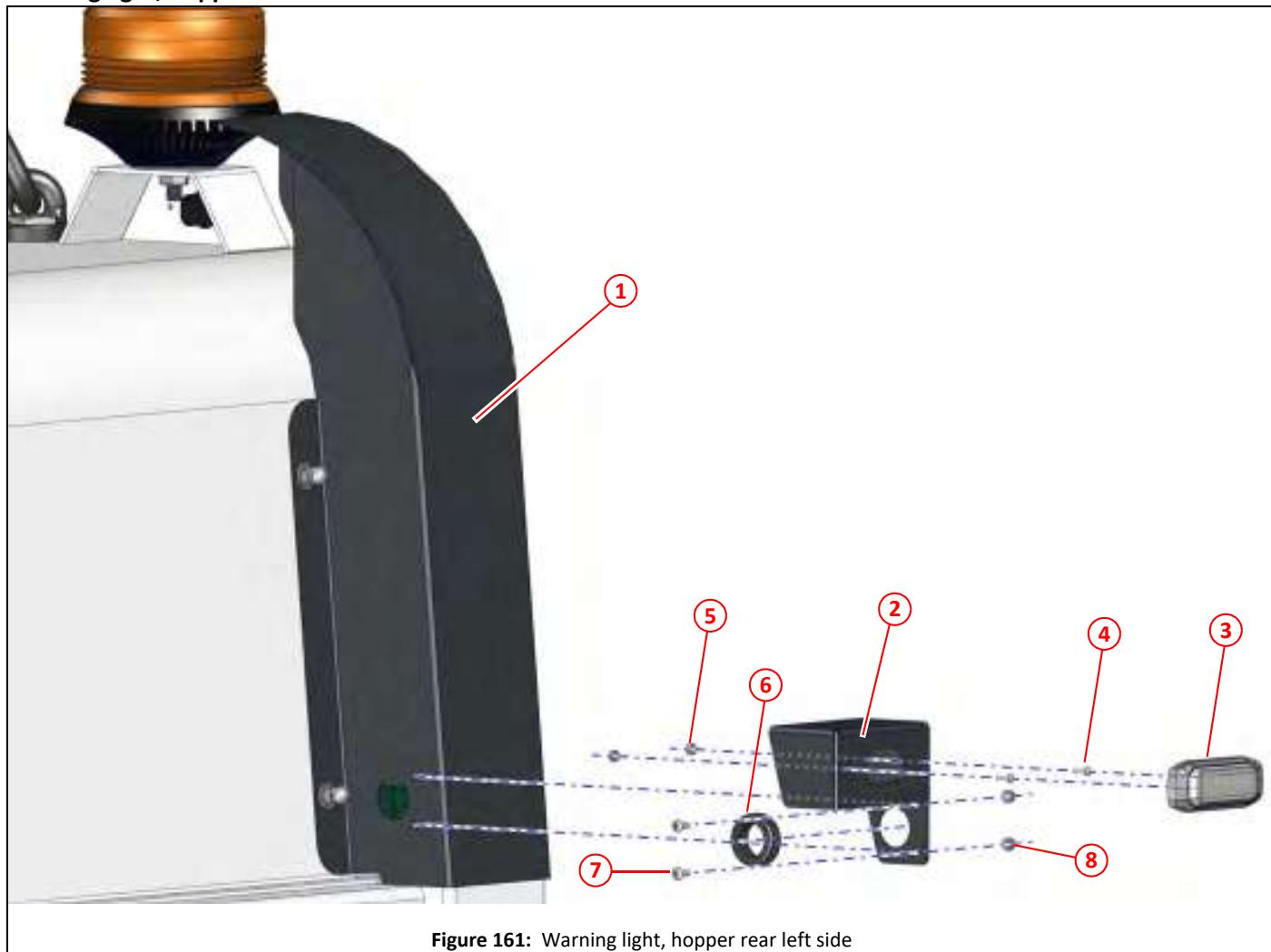
| Item | Part No  | Qty | Description                                       |
|------|----------|-----|---|
| ①    | 047979 * | 1   | LED warning light assembly                        |
| ②    | 048239 * | 1   | Light bracket, rear                               |
| ③    | 000540 * | 2   | Socket button head screw M3 x 10, stainless steel |
| ④    | 000359 * | 2   | Nyloc nut M3, stainless steel                     |
| ⑤    | 000542 * | 2   | Socket button head screw M4 x 16, stainless steel |
| ⑥    | 000541 * | 2   | Nyloc nut M4, stainless steel                     |

\*. Quantity is per light. Number of lights fitted depends on specification of the sweeper.

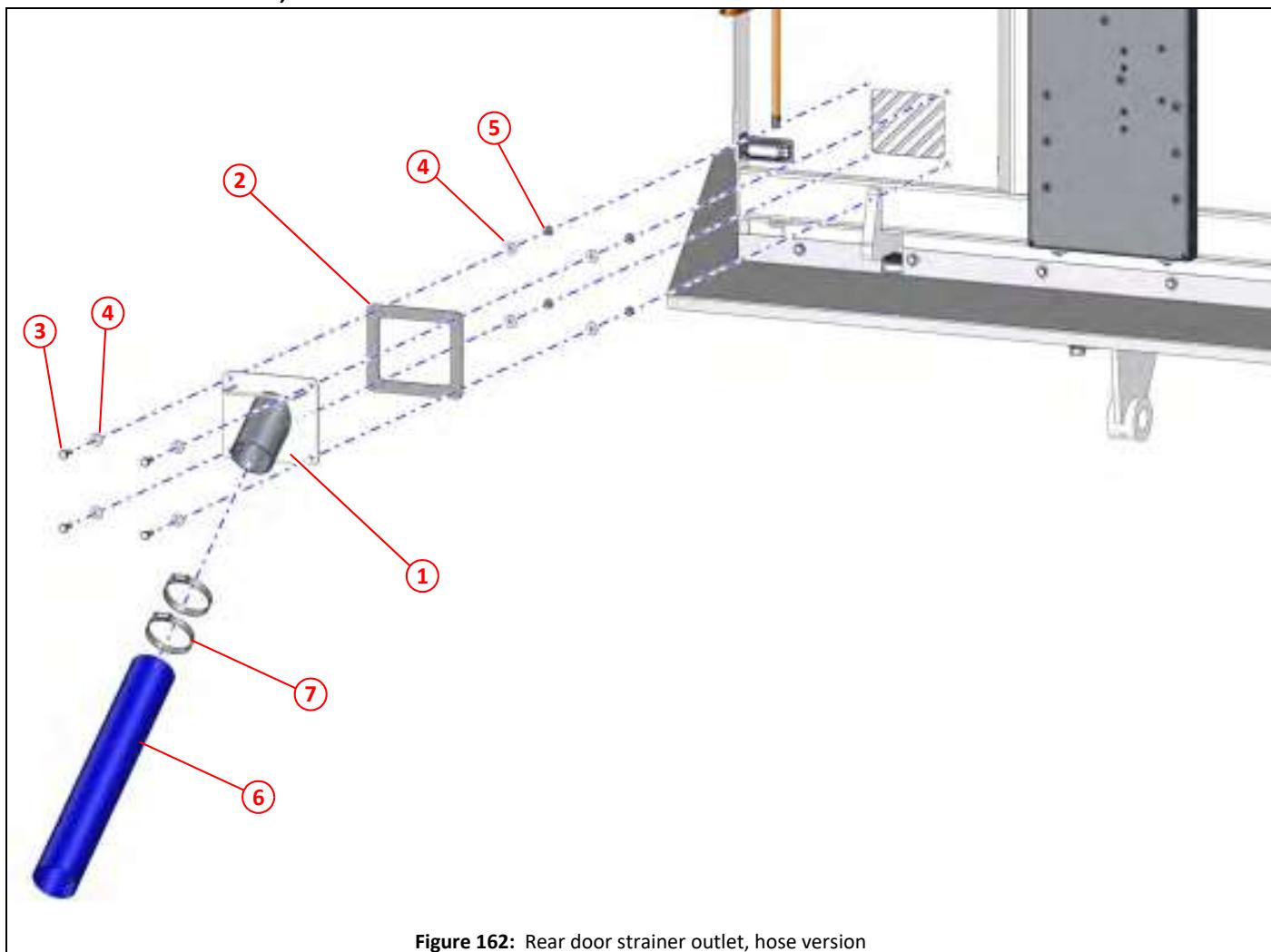
**Warning light, hopper rear right side**

**Figure 160:** Warning light, hopper rear right side

| Item | Part No | Qty | Description                                       |
|------|---------|-----|---|
| ①    | 047033  | 1   | Hopper capping, right hand                        |
| ②    | 048244  | 1   | Light bracket (side), right hand                  |
| ③    | 047979  | 1   | LED warning light assembly                        |
| ④    | 000540  | 2   | Socket button head screw M3 x 10, stainless steel |
| ⑤    | 000359  | 2   | Nyloc nut M3, stainless steel                     |
| ⑥    | 048204  | 1   | Grommet ø25.4 x ø22                               |
| ⑦    | 000543  | 2   | Socket button head screw M4 x 10, stainless steel |
| ⑧    | 000541  | 2   | Nyloc nut M4, stainless steel                     |

## Warning light, hopper rear left side



| Item | Part No | Qty | Description                                       |
|------|---------|-----|---|
| ①    | 047032  | 1   | Hopper capping, left hand                         |
| ②    | 048245  | 1   | Light bracket (side), left hand                   |
| ③    | 047979  | 1   | LED warning light assembly                        |
| ④    | 000540  | 2   | Socket button head screw M3 x 10, stainless steel |
| ⑤    | 000359  | 2   | Nyloc nut M3, stainless steel                     |
| ⑥    | 048204  | 1   | Grommet ø25.4 x ø22                               |
| ⑦    | 000543  | 2   | Socket button head screw M4 x 10, stainless steel |
| ⑧    | 000541  | 2   | Nyloc nut M4, stainless steel                     |

**Rear door strainer outlet, hose version**


| Item | Part No | Qty | Description                       |
|------|---------|-----|-----------------------------------|
| ①    | 047026  | 1   | Rear door strainer outlet         |
| ②    | 047027  | 1   | Gasket, rear door strainer outlet |
| ③    | 000257  | 4   | Setscrew M8 x 25, stainless steel |
| ④    | 000264  | 8   | Washer M8, stainless steel        |
| ⑤    | 000263  | 4   | Nyloc nut T M8, stainless steel   |
| ⑥    | 010998  | 1   | Hose, lay-flat blue               |
| ⑦    | 012931  | 2   | Jubilee clip No 4 [Ø70 - Ø90]     |

## Hopper and body

### Rear door strainer outlet, valve version

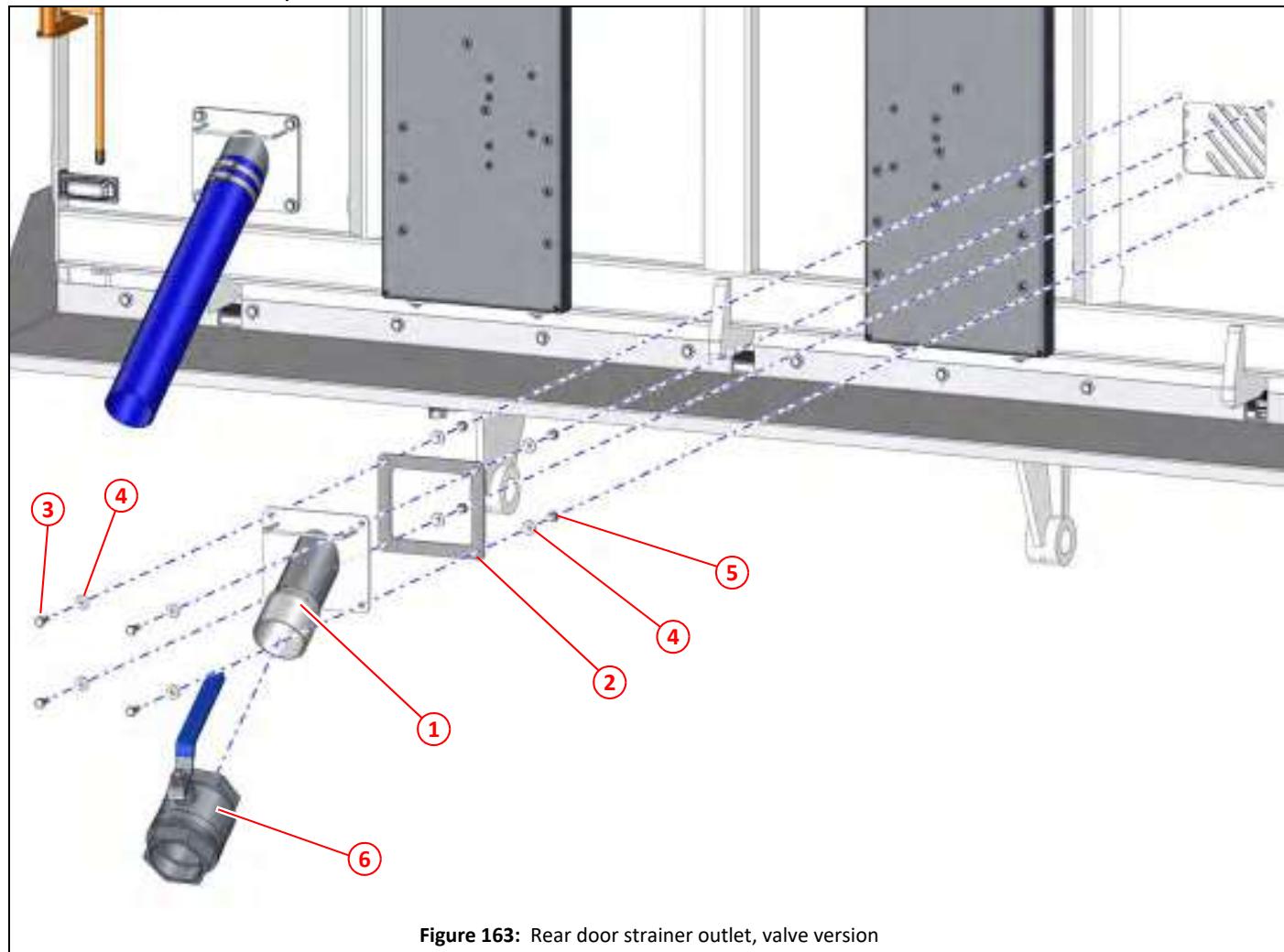
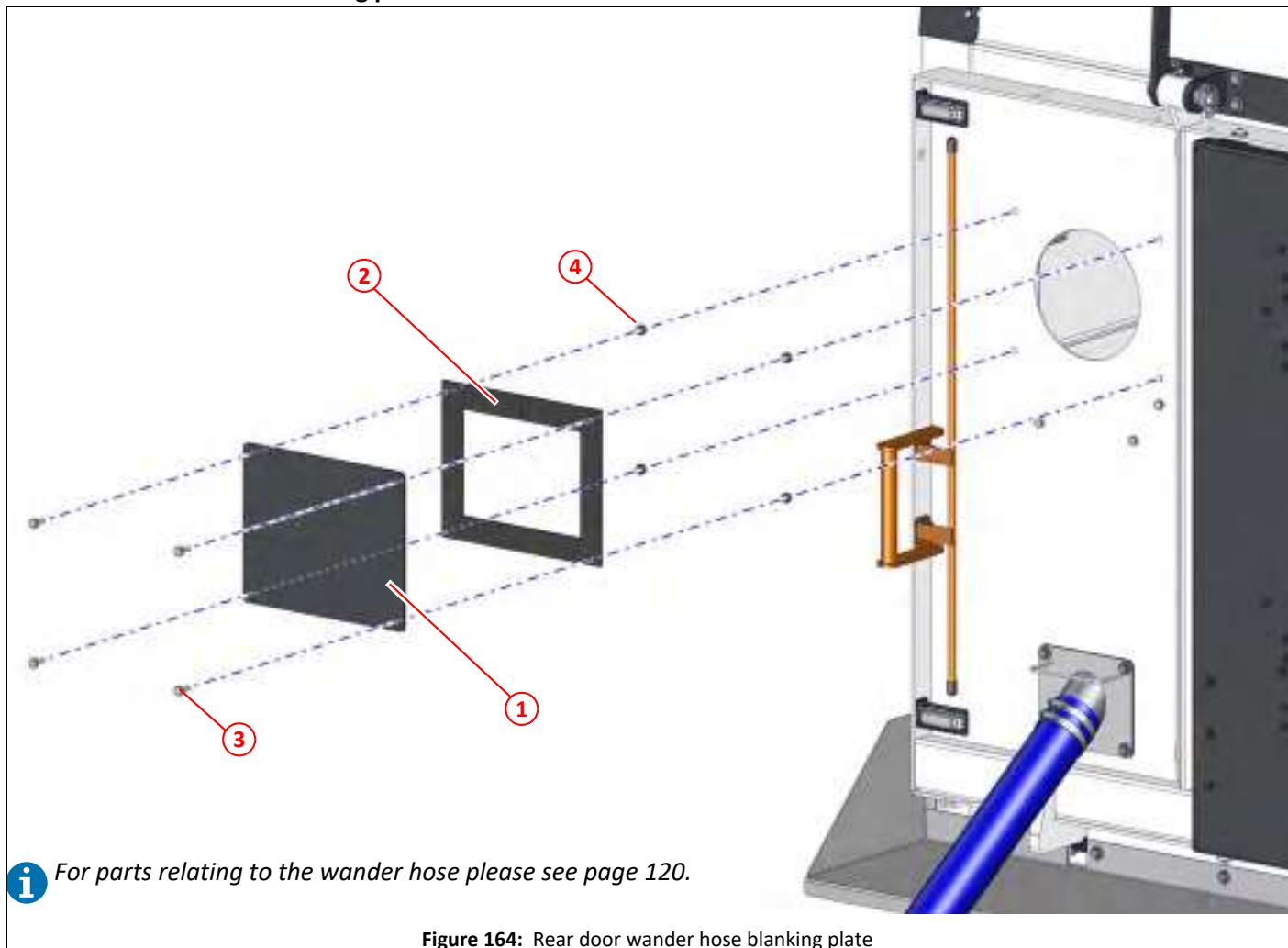


Figure 163: Rear door strainer outlet, valve version

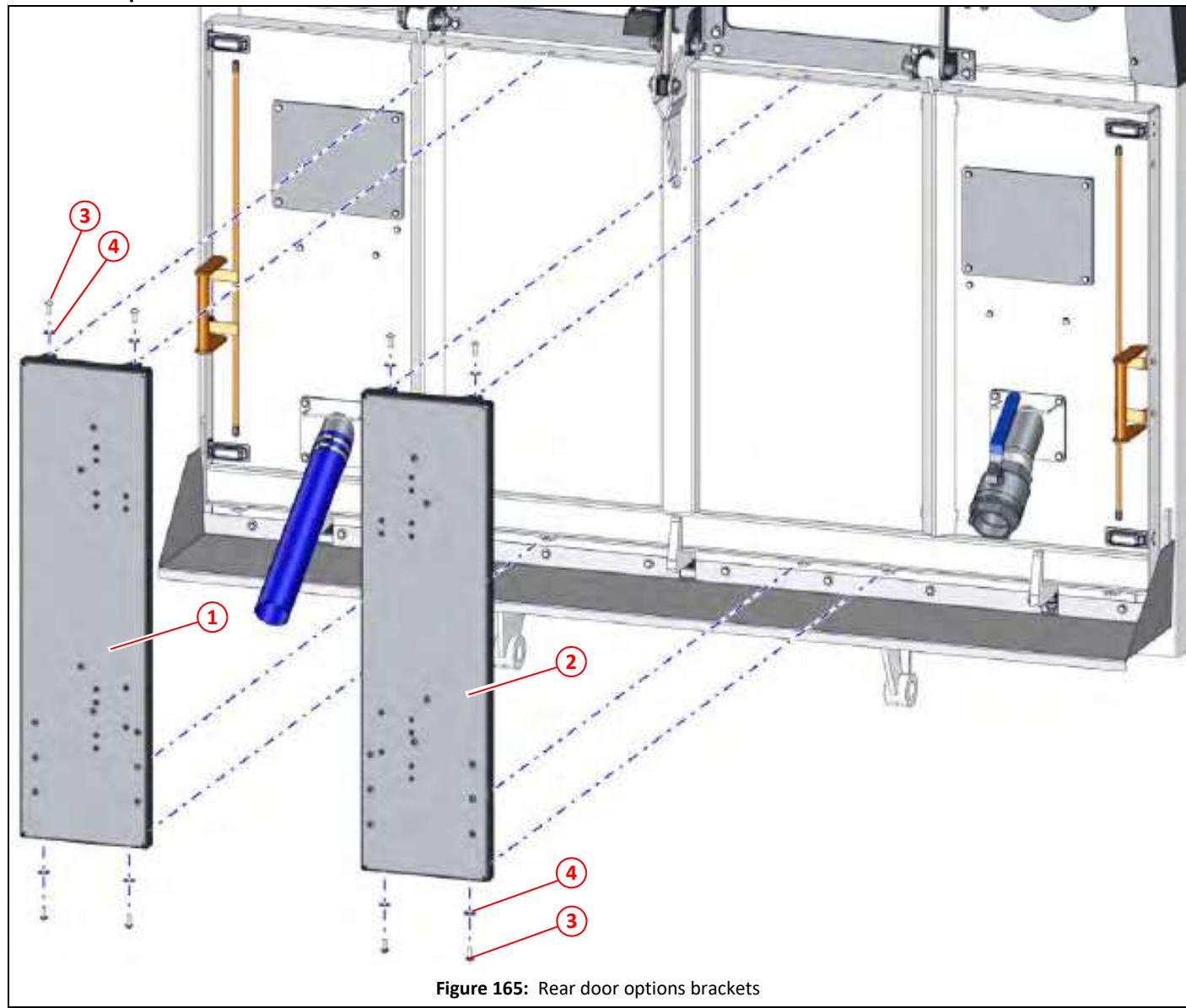
| Item | Part No | Qty | Description                            |
|------|---------|-----|--|
| ①    | 047141  | 1   | Rear door strainer outlet for valve    |
| ②    | 047027  | 1   | Gasket, rear door strainer outlet      |
| ③    | 000257  | 4   | Setscrew M8 x 25, stainless steel      |
| ④    | 000264  | 8   | Washer M8, stainless steel             |
| ⑤    | 000263  | 4   | Nyloc nut T M8, stainless steel        |
| ⑥    | 002116  | 1   | Valve, ball, 3" BSP, comes with handle |

**Rear door wander hose blanking plate**

**Figure 164:** Rear door wander hose blanking plate

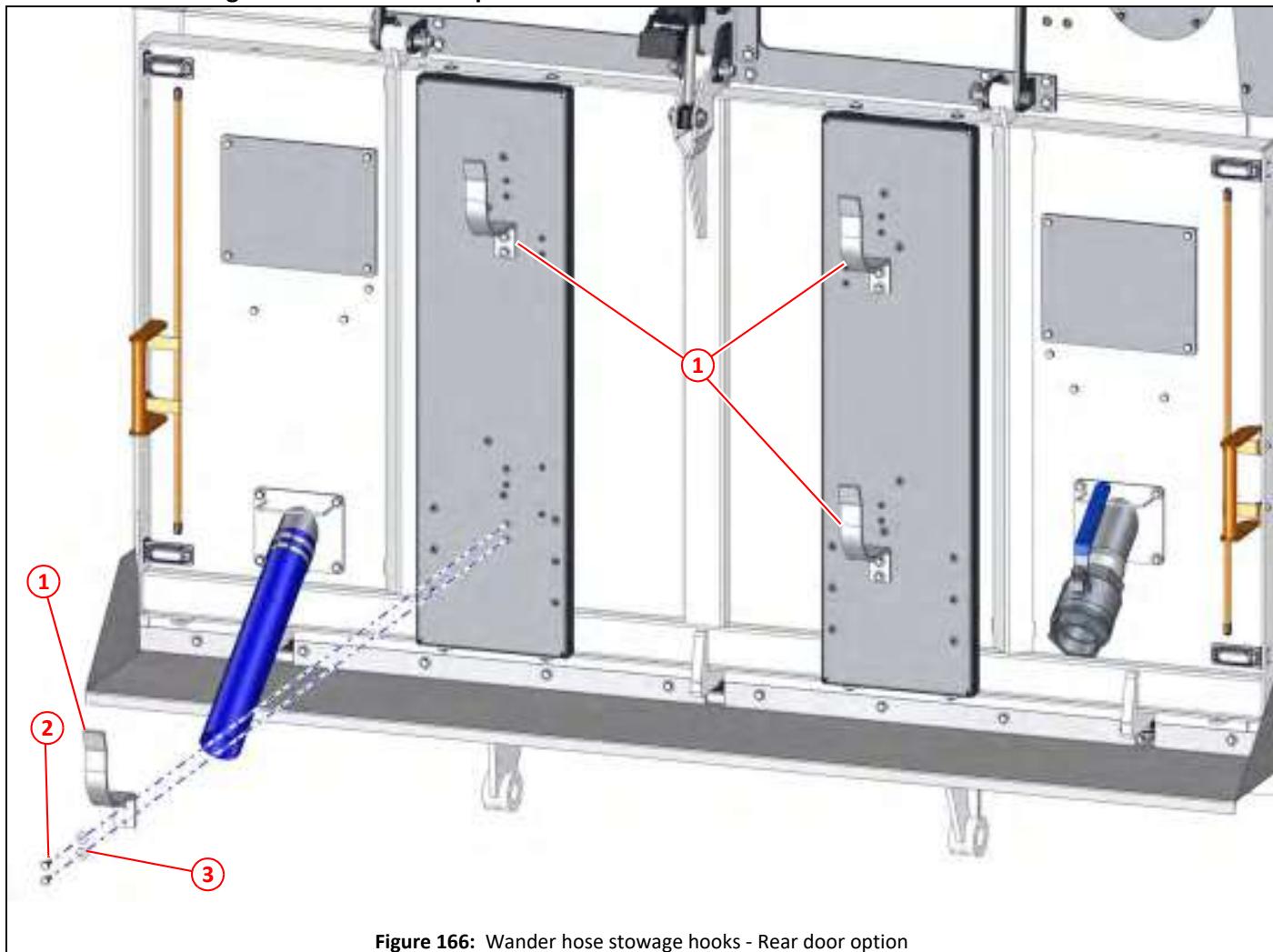
| Item | Part No  | Qty | Description                          |  |
|------|----------|-----|--------------------------------------|--|
| (1)  | 047261 * | 1   | Blanking plate, wander hose          |  |
| (2)  | 010546   | 1   | Inseal strip, cut length as required |  |
| (3)  | 000256   | 4   | Setscrew M8 x 20, stainless steel    |  |
| (4)  | 000263   | 4   | Nyloc nut T M8, stainless steel      |  |

\*. Two will be fitted if no wander hose or wander boom fitted.

## Rear door options brackets



| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 046982  | 1   | Rear door options bracket, left hand               |
| ②    | 046983  | 1   | Rear door options bracket, right hand              |
| ③    | 000344  | 8   | Socket button head screw M10 x 25, stainless steel |
| ④    | 000270  | 8   | Washer M10, stainless steel                        |

**Wander hose stowage hooks - Rear door option**

**Figure 166:** Wander hose stowage hooks - Rear door option

| Item | Part No | Qty | Description                       |
|------|---------|-----|-----------------------------------|
| (1)  | 010245  | 4   | Hose hook, wander hose            |
| (2)  | 000257  | 8   | Setscrew M8 x 25, stainless steel |
| (3)  | 000264  | 8   | Washer M8, stainless steel        |

## Direction arrow, when no hose hooks - Rear door option

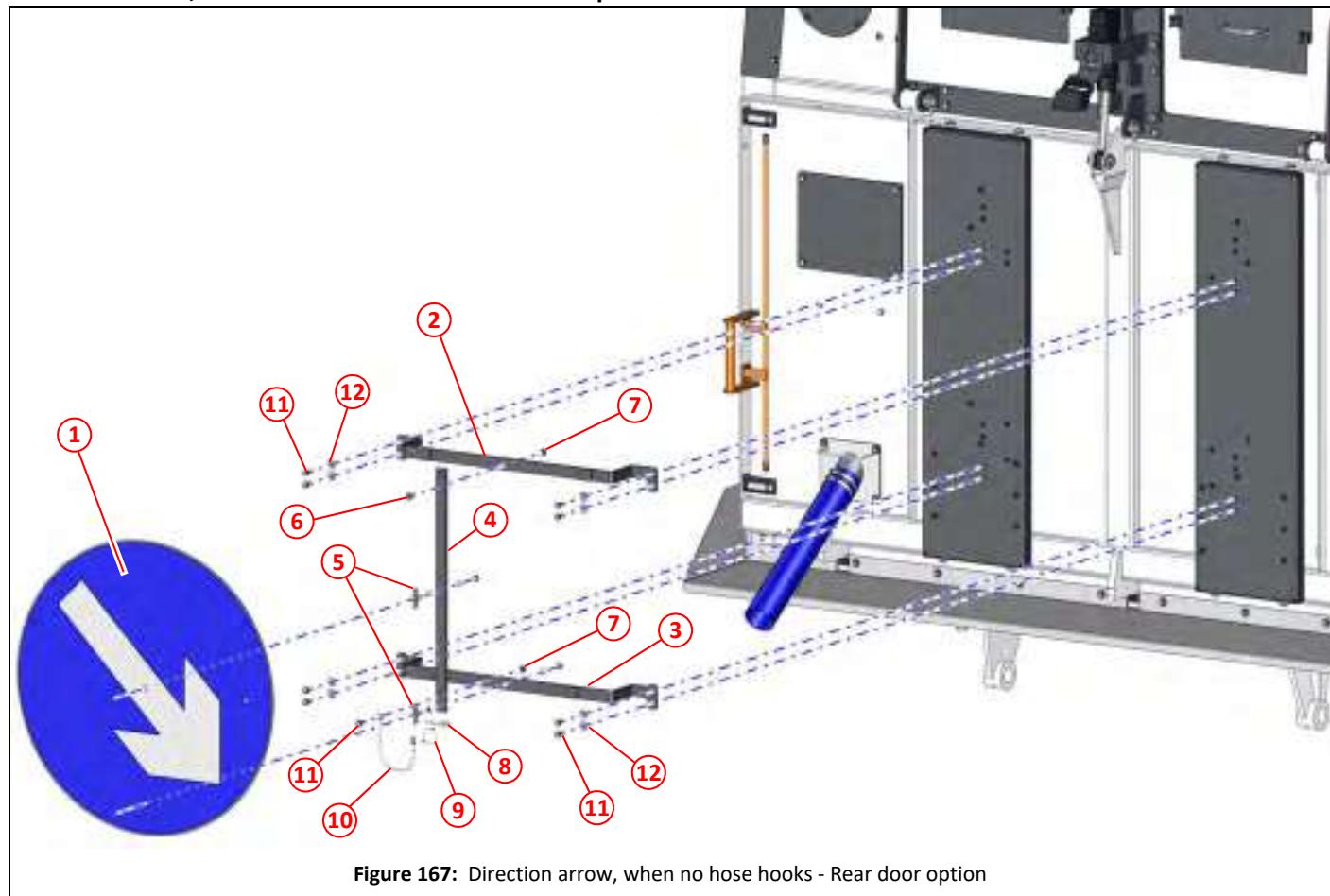
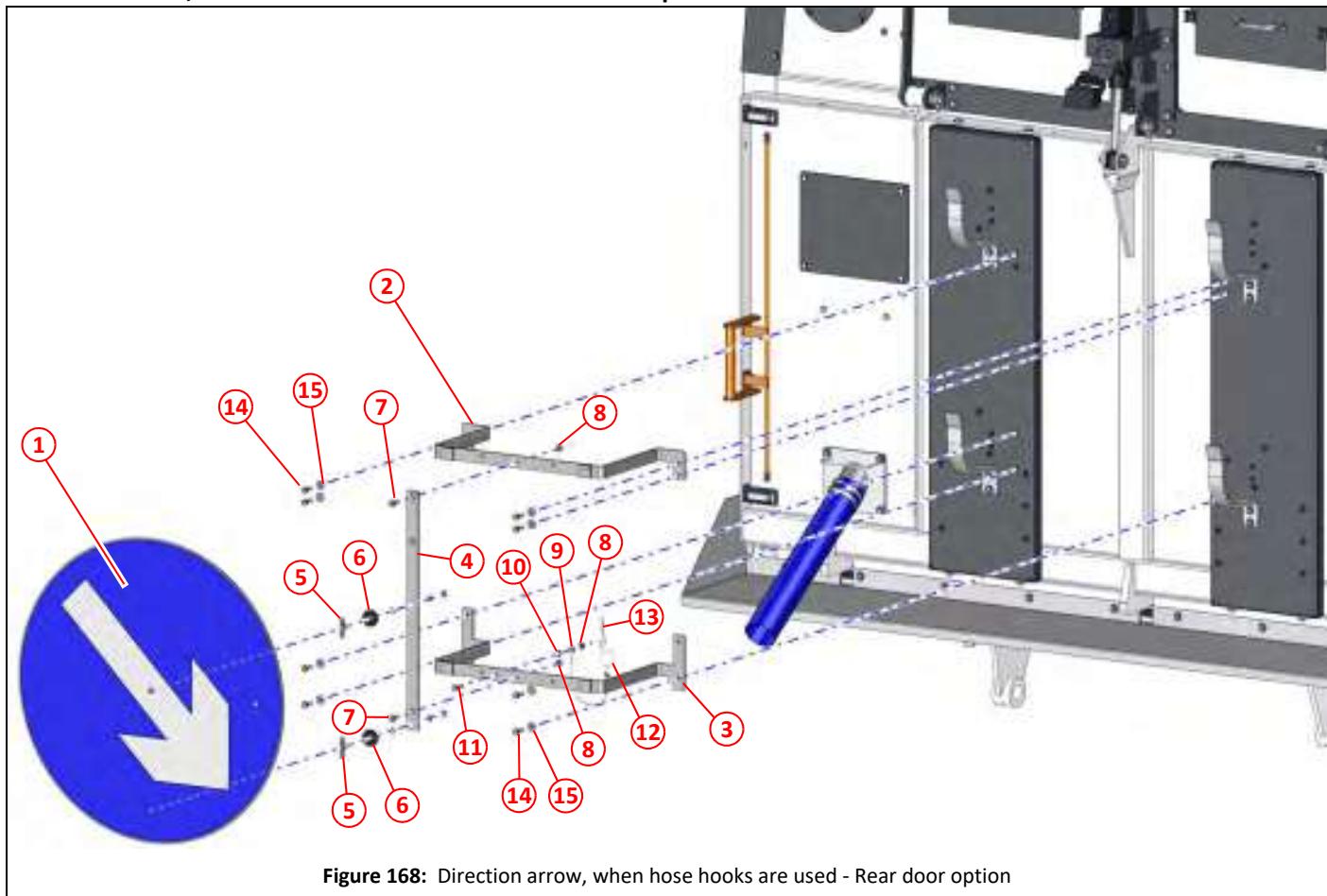


Figure 167: Direction arrow, when no hose hooks - Rear door option

| Item | Part No | Qty | Description                              |
|------|---------|-----|--|
| ①    | 021869  | 1   | Direction sign ø750                      |
| ②    | 035818  | 1   | Rear sign upper support, no hose hooks   |
| ③    | 035819  | 1   | Rear sign lower support, no hose hooks   |
| ④    | 031978  | 1   | Rear sign centre support                 |
| ⑤    | 012253  | 2   | Antiluce, small, includes washer and nut |
| ⑥    | 000109  | 1   | Countersunk slotted screw M8 x 25        |
| ⑦    | 011073  | 2   | Nyloc nut T M8                           |
| ⑧    | 021944  | 1   | R-clip, double wound, ø3 wire            |
| ⑨    | 023599  | 1   | Ring pull                                |
| ⑩    | 020711  | 1   | Leash cable                              |
| ⑪    | 000257  | 9   | Setscrew M8 x 25, stainless steel        |
| ⑫    | 000264  | 8   | Washer M8, stainless steel               |

**Direction arrow, when hose hooks are used - Rear door option**

**Figure 168: Direction arrow, when hose hooks are used - Rear door option**

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 021869  | 1   | Direction sign $\varnothing 750$                              |
| ②    | 031976  | 1   | Rear sign upper support                                       |
| ③    | 031977  | 1   | Rear sign lower support                                       |
| ④    | 031982  | 1   | Rear sign centre support                                      |
| ⑤    | 012253  | 2   | Antiluce, small, includes washer and nut                      |
| ⑥    | 012969  | 2   | Rubber washer $\varnothing 40 \times \varnothing 12 \times 6$ |
| ⑦    | 000109  | 2   | Countersunk slotted screw M8 x 25                             |
| ⑧    | 011073  | 3   | Nyloc nut T M8  |
| ⑨    | 020711  | 1   | Leash cable   |
| ⑩    | 011072  | 1   | Full nut M8   |
| ⑪    | 011012  | 1   | Setscrew HT M8 x 30   |
| ⑫    | 023599  | 1   | Ring pull   |
| ⑬    | 021944  | 1   | R-clip, double wound, $\varnothing 3$ wire                    |
| ⑭    | 000257  | 8   | Setscrew M8 x 25, stainless steel                             |
| ⑮    | 000264  | 8   | Washer M8, stainless steel                                    |

## Light Arrow - Rear door option

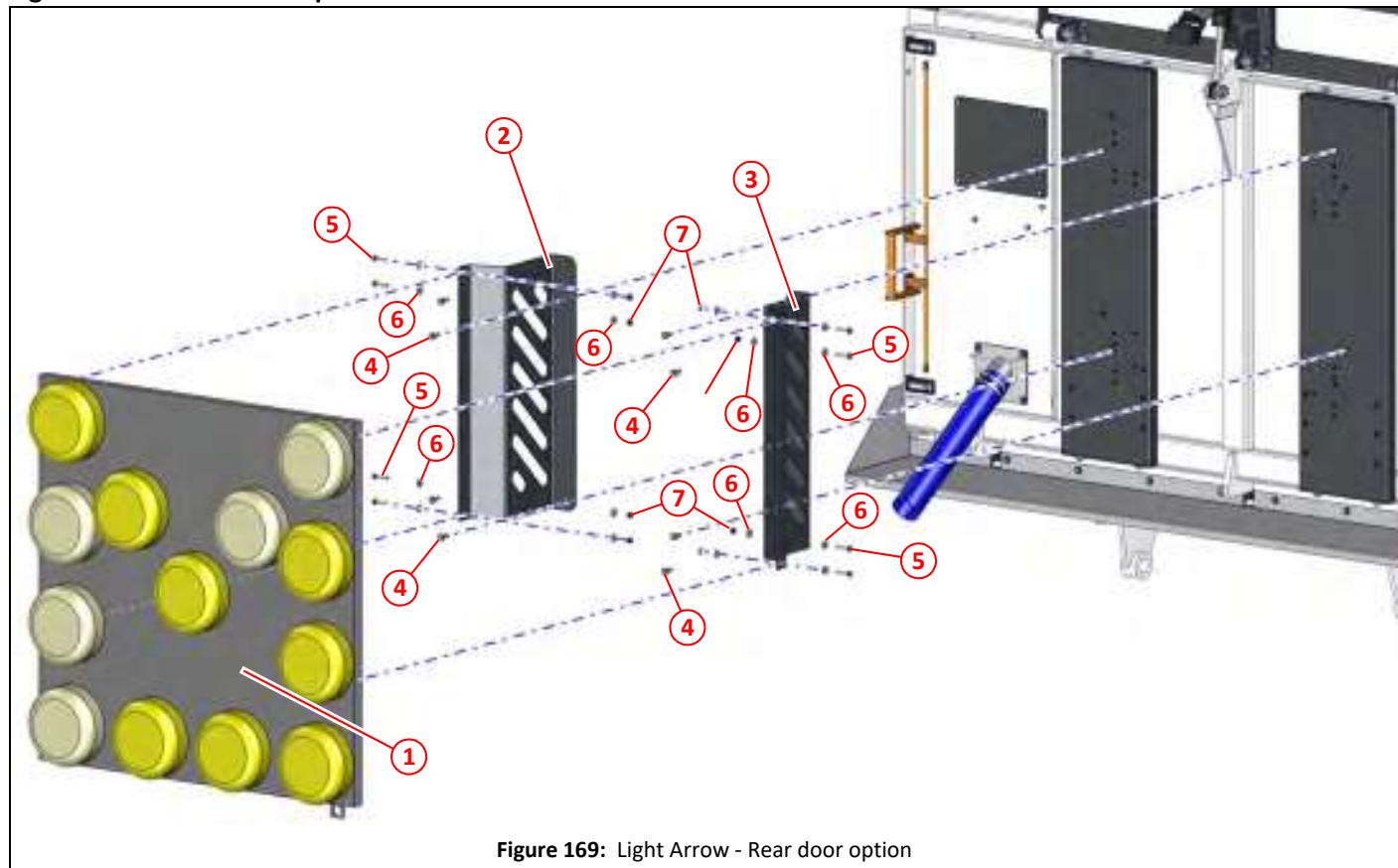
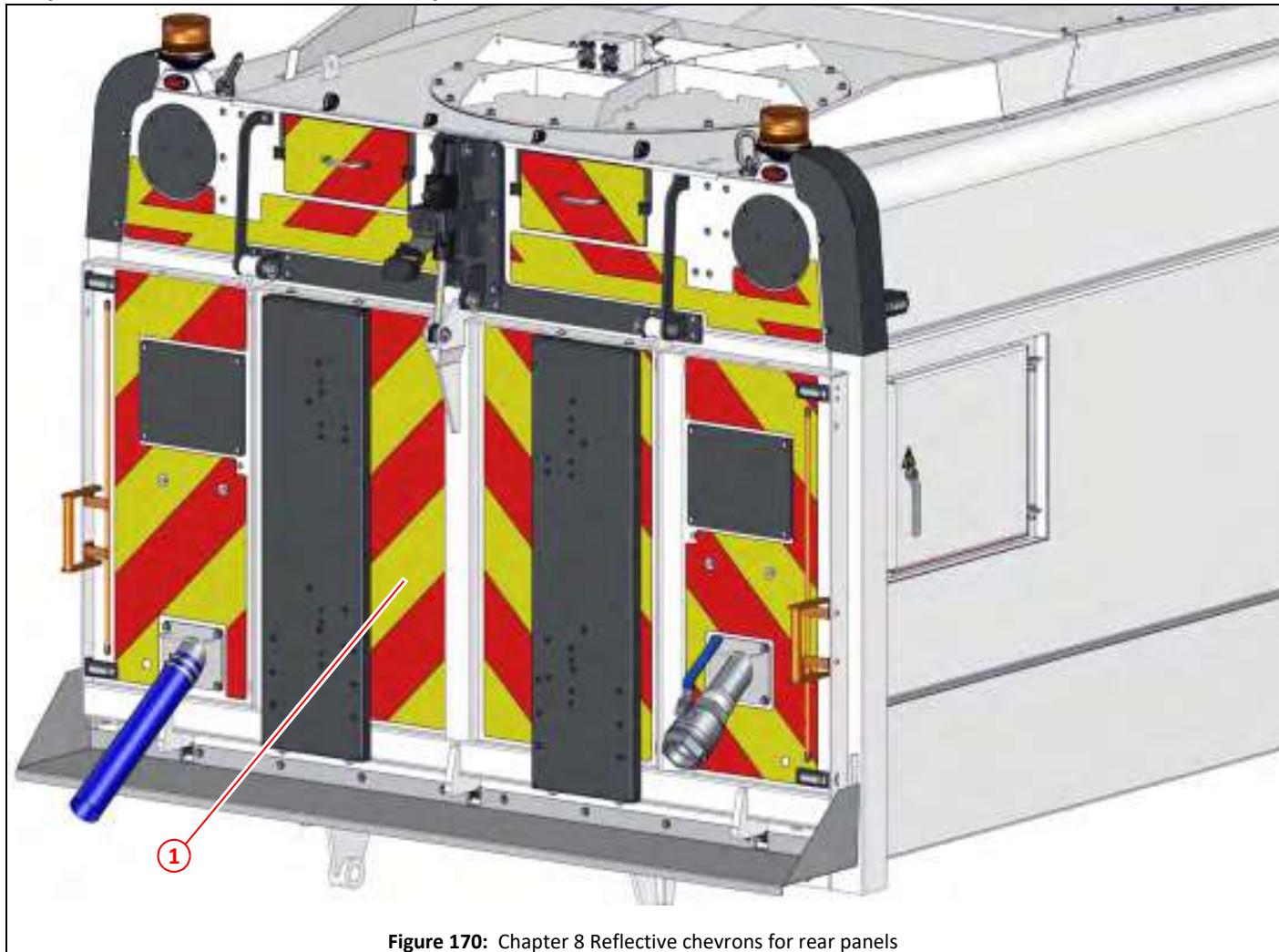


Figure 169: Light Arrow - Rear door option

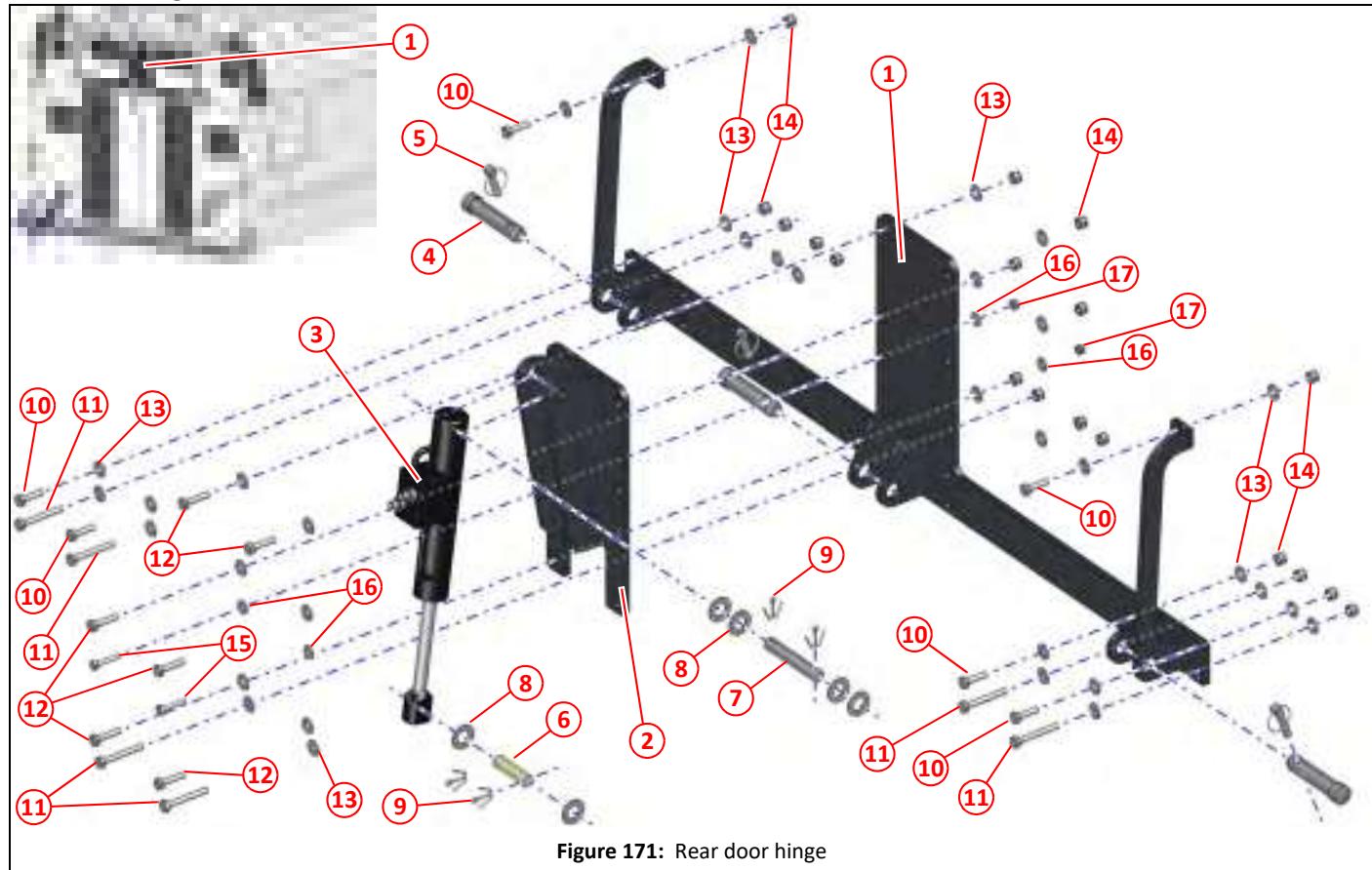
| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 042500  | 1   | LP13 Mini Light Arrow, fixed, 24V LED               |
| NI   | 045565  | 1   | Spare LED bulb for LP13 Mini Light Arrow, 24V       |
| ②    | 042501  | 1   | Mounting bracket, LP13 Mini Light Arrow, left hand  |
| ③    | 042502  | 1   | Mounting bracket, LP13 Mini Light Arrow, right hand |
| ④    | 000280  | 8   | Setscrew M10 x25, stainless steel                   |
| ⑤    | 011014  | 8   | Setscrew M8 x 40, stainless steel                   |
| ⑥    | 011092  | 16  | Washer M8   |
| ⑦    | 011073  | 8   | Nyloc nut T M8                                      |

## Chapter 8 Reflective chevrons for rear panels

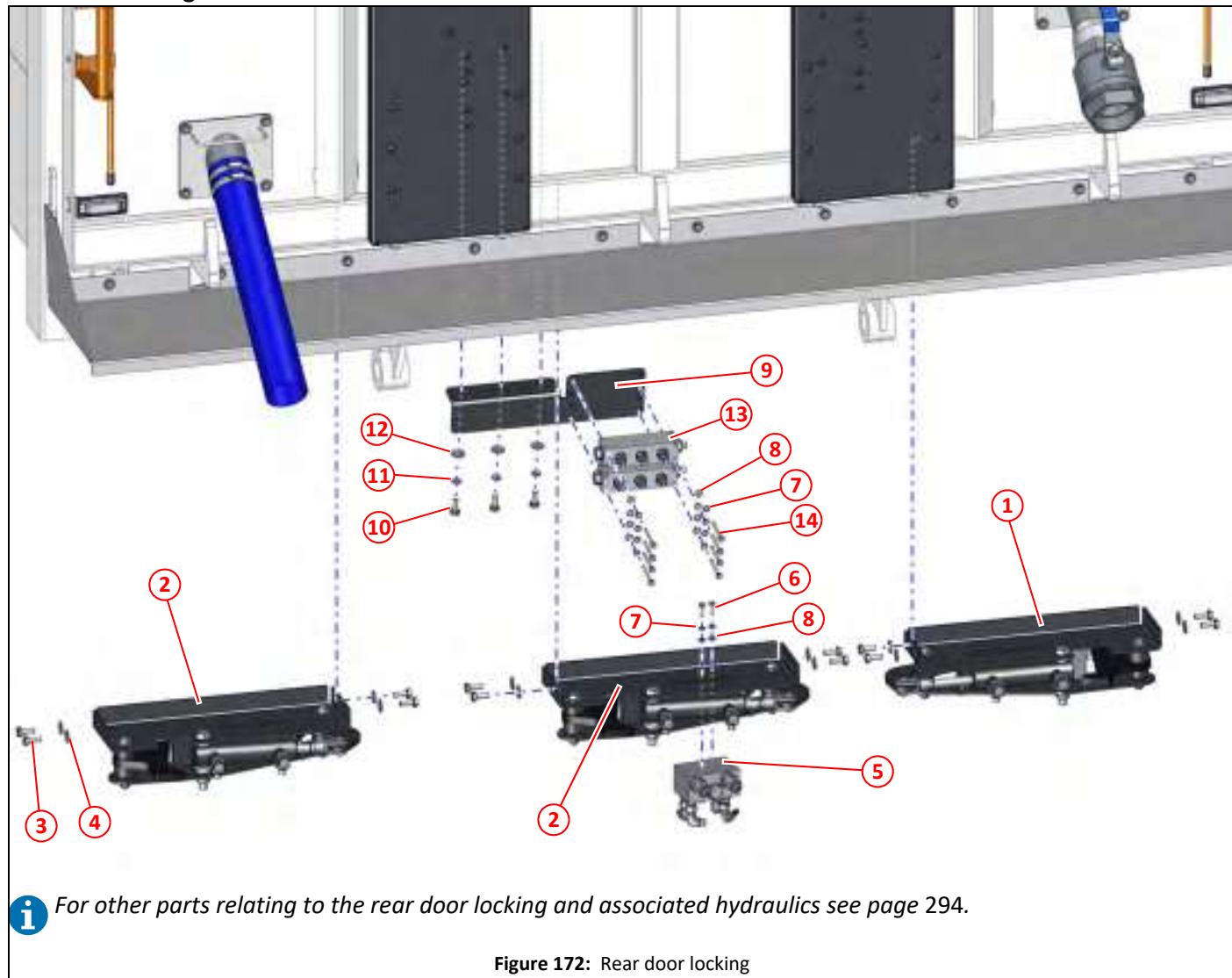


| Item | Part No | Qty | Description                                   | File |
|------|---------|-----|---|------|
| ①    | 047214  | 1   | Chapter 8 Reflective chevrons for rear panels |      |

## Rear door hinge



| Item | Part No | Qty | Description                                    |     |
|------|---------|-----|--|-----|
| ①    | 024345  | 1   | Adjustable hinge plate, rear door              |     |
| ②    | 024346  | 1   | Adjustable ram mount, rear door                |     |
| ③    | 022511  | 1   | Ram, open/close, rear door                     | 287 |
| ④    | 013051  | 3   | Hinge pin                                      |     |
| ⑤    | 013053  | 3   | Lynch pin                                      |     |
| ⑥    | 014038  | 1   | Pin Ø20 x 70                                   |     |
| ⑦    | 022558  | 1   | Pin, ram, rear door                            |     |
| ⑧    | 011102  | 6   | Washer M20                                     |     |
| ⑨    | 011122  | 4   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ " |     |
| ⑩    | 011033  | 6   | Setscrew HT M10 x 35                           |     |
| ⑪    | 011043  | 6   | Bolt HT M10 x 70                               |     |
| ⑫    | 011034  | 6   | Setscrew M10 x 40                              |     |
| ⑬    | 011094  | 34  | Washer M8                                      |     |
| ⑭    | 011075  | 18  | Nyloc nut T M10                                |     |
| ⑮    | 011014  | 2   | Setscrew HT M8 x 40                            |     |
| ⑯    | 011092  | 4   | Washer M8                                      |     |
| ⑰    | 011073  | 2   | Nyloc nut T M8                                 |     |

**Rear door locking**


| Item | Part No | Qty | Description                             |         |
|------|---------|-----|---|---------|
| ①    | 048017  | 1   | Rear door locking, right hand, assembly | 294,296 |
| ②    | 048018  | 2   | Rear door locking, left hand, assembly  | 294,297 |
| ③    | 000280  | 12  | Setscrew M10 x 25, stainless steel      |         |
| ④    | 000270  | 12  | Washer M10, stainless steel             |         |
| ⑤    | 047381  | 1   | Sequence valve, door locking, assembly  | 295     |
| ⑥    | 011067  | 2   | Setscrew HT M6 x 20                     |         |
| ⑦    | 011091  | 10  | Spring washer M6                        |         |
| ⑧    | 011090  | 10  | Washer M6                               |         |
| ⑨    | 048477  | 1   | Bracket, manifold, door locking         | 298     |
| ⑩    | 011031  | 3   | Setscrew HT M10 x 25                    |         |
| ⑪    | 011095  | 3   | Spring washer M10                       |         |
| ⑫    | 011094  | 3   | Washer M10                              |         |
| ⑬    | 047246  | 2   | Manifold, door locking, assembly        | 298     |
| ⑭    | 000018  | 8   | Setscrew HT M6 x 55                     |         |

## Hopper chute

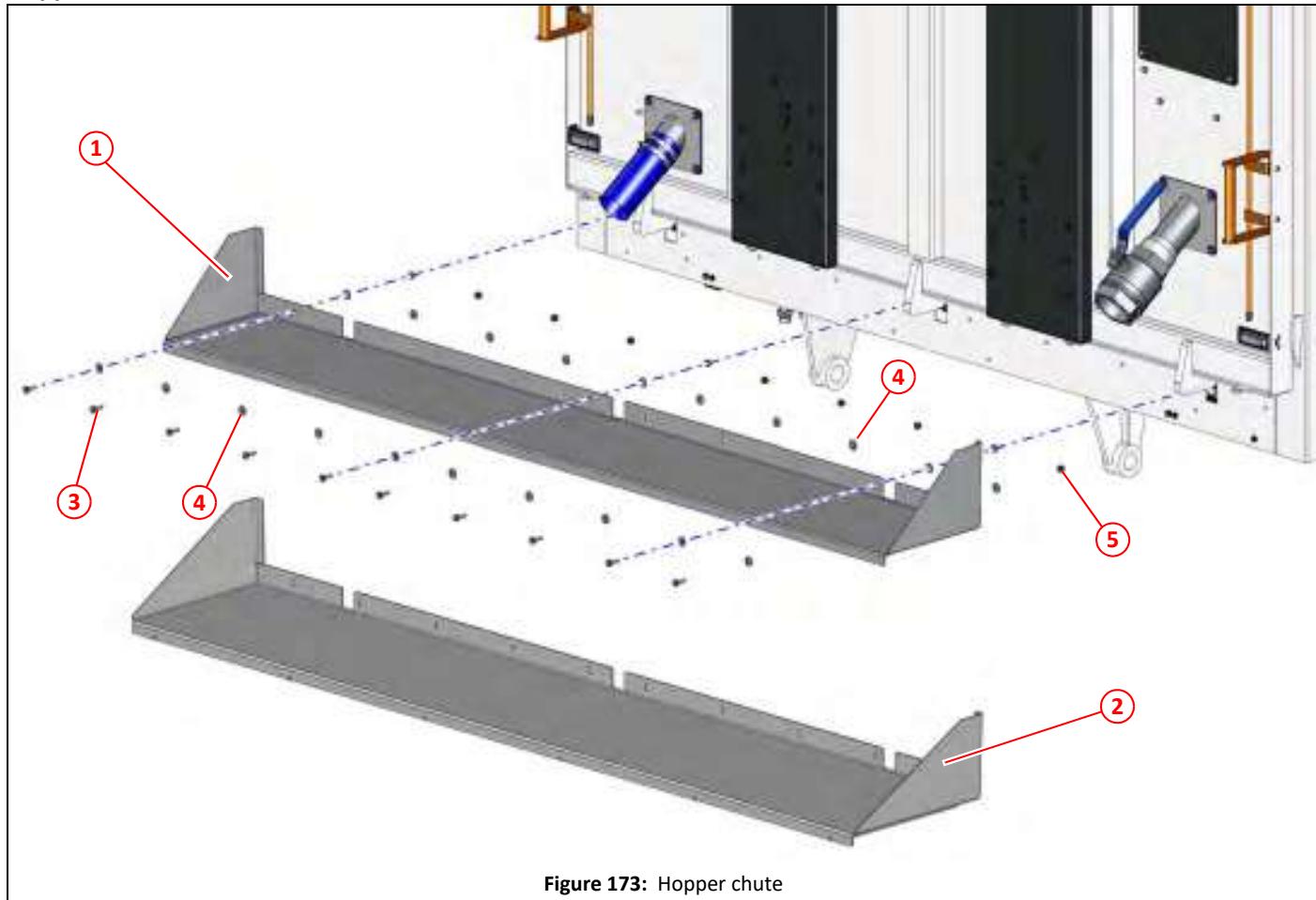
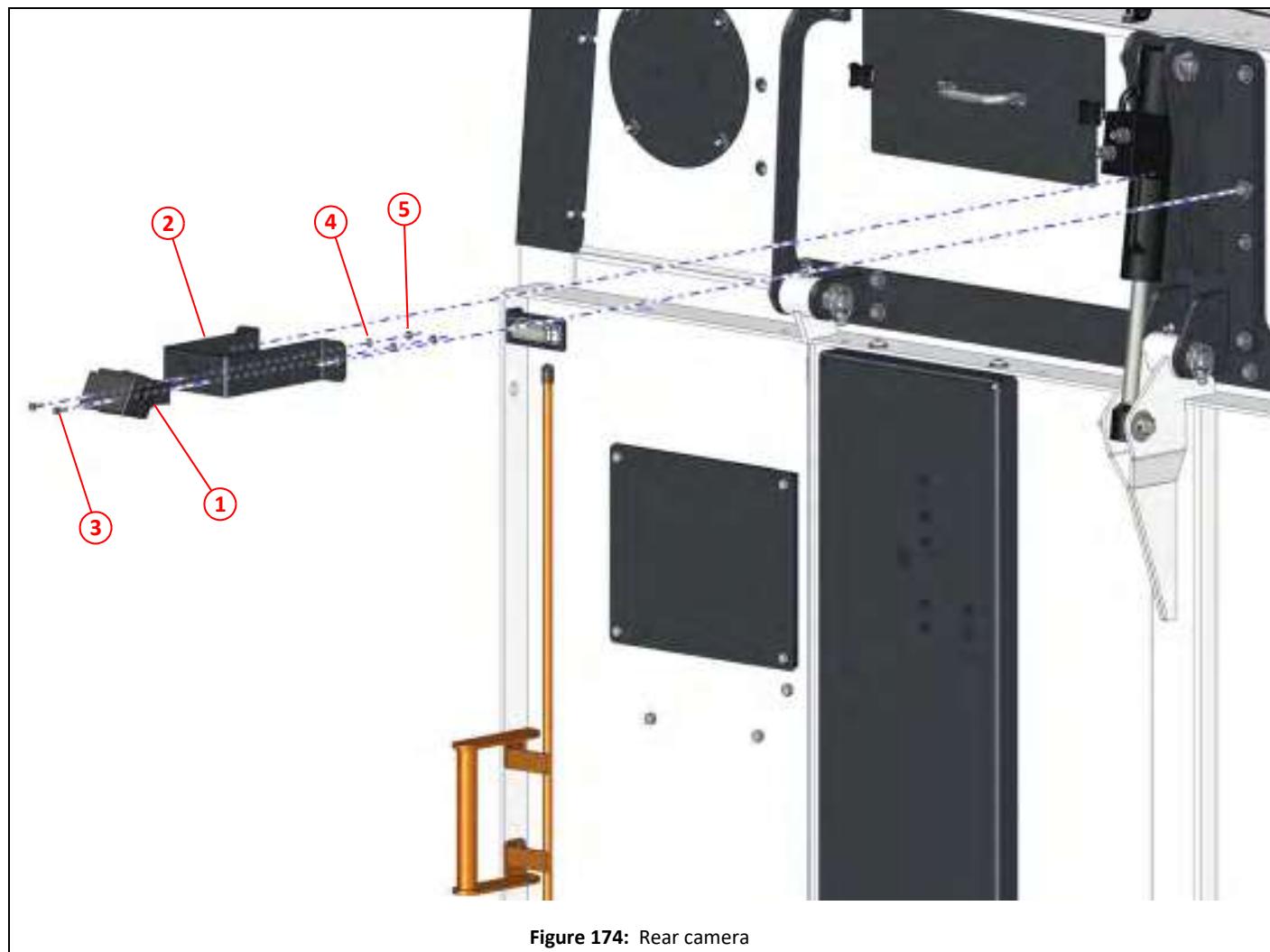


Figure 173: Hopper chute

| Item | Part No | Qty | Description                       |
|------|---------|-----|-----------------------------------|
| ①    | 046845  | 1   | Hopper chute, large               |
| ②    | 048918  | 1   | Hopper chute 400mm                |
| ③    | 000257  | 10  | Setscrew M8 x 25, stainless steel |
| ④    | 000264  | 20  | Washer M8, stainless steel        |
| ⑤    | 000263  | 10  | Nyloc nut T M8, stainless steel   |

**Rear camera**

**Figure 174: Rear camera**

| Item | Part No | Qty | Description             |
|------|---------|-----|-------------------------|
| (1)  | 040354  | 1   | Camera, (120) VBVC 790C |
| (2)  | 036437  | 1   | Mount, rear camera      |
| (3)  | 000052  | 2   | Bolt M5 x 16            |
| (4)  | 000410  | 2   | Washer M5               |
| (5)  | 000155  | 2   | Nyloc nut M5            |



# Water

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## Schematic - Low pressure water, dual sweep, no additional water

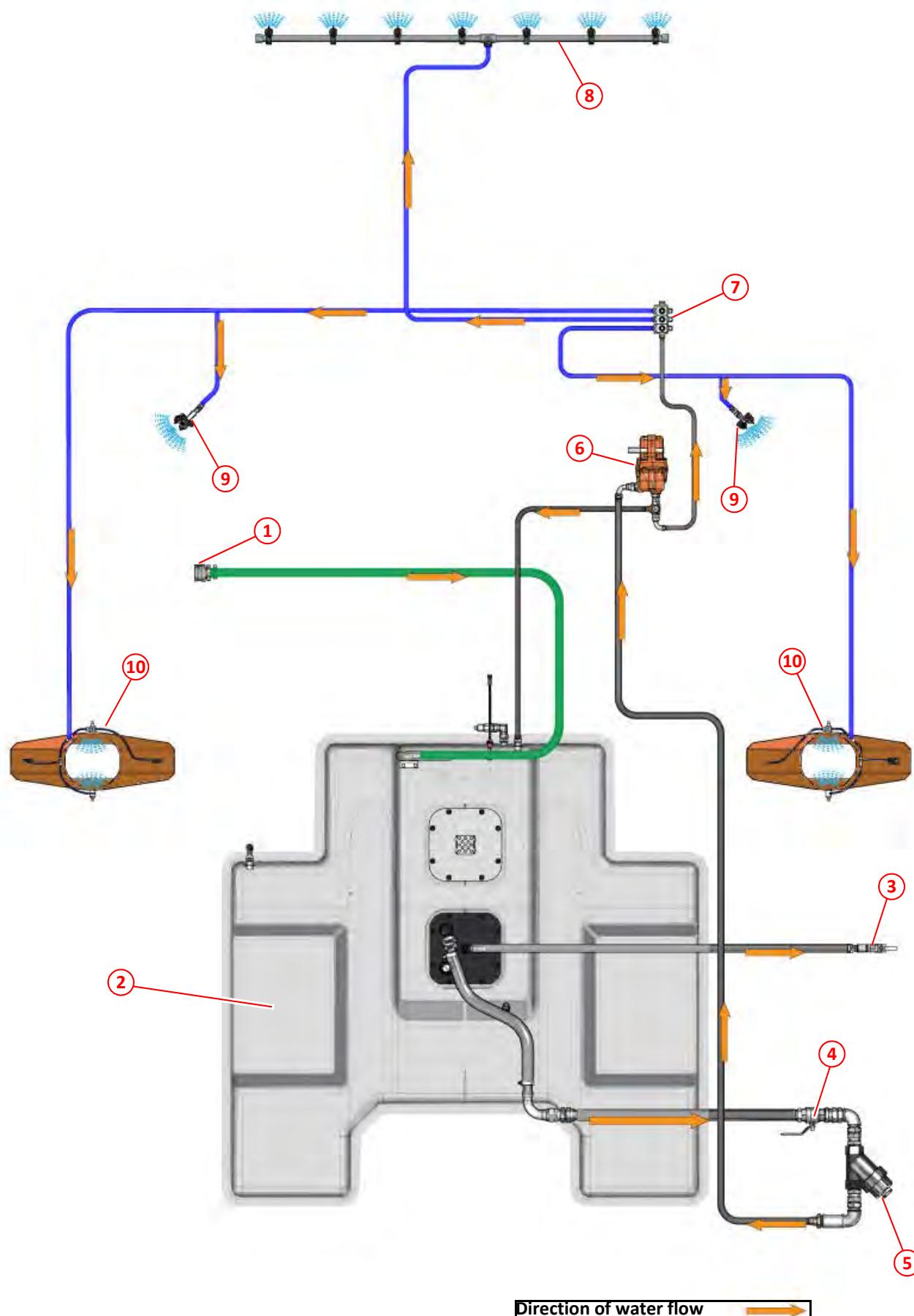


Figure 175: Schematic - Low pressure water, dual sweep, no additional water

| Item | Description                            |     |
|------|--|-----|
| ①    | Water filler                           |     |
| ②    | Water tank                             | 210 |
| ③    | Drain valve, water tank                | 216 |
| ④    | Valve, ball, 1½" BSP, low pressure     | 229 |
| ⑤    | Water strainer/filter                  | 229 |
| ⑥    | Water pump, low pressure               | 231 |
| ⑦    | Water control valves, low pressure     | 234 |
| ⑧    | Front spray bar, low pressure          | 240 |
| ⑨    | Side brush water jets, low pressure    | 237 |
| ⑩    | Suction nozzle box water, low pressure | 238 |

## Schematic - Low and high pressure water, dual sweep, no additional water

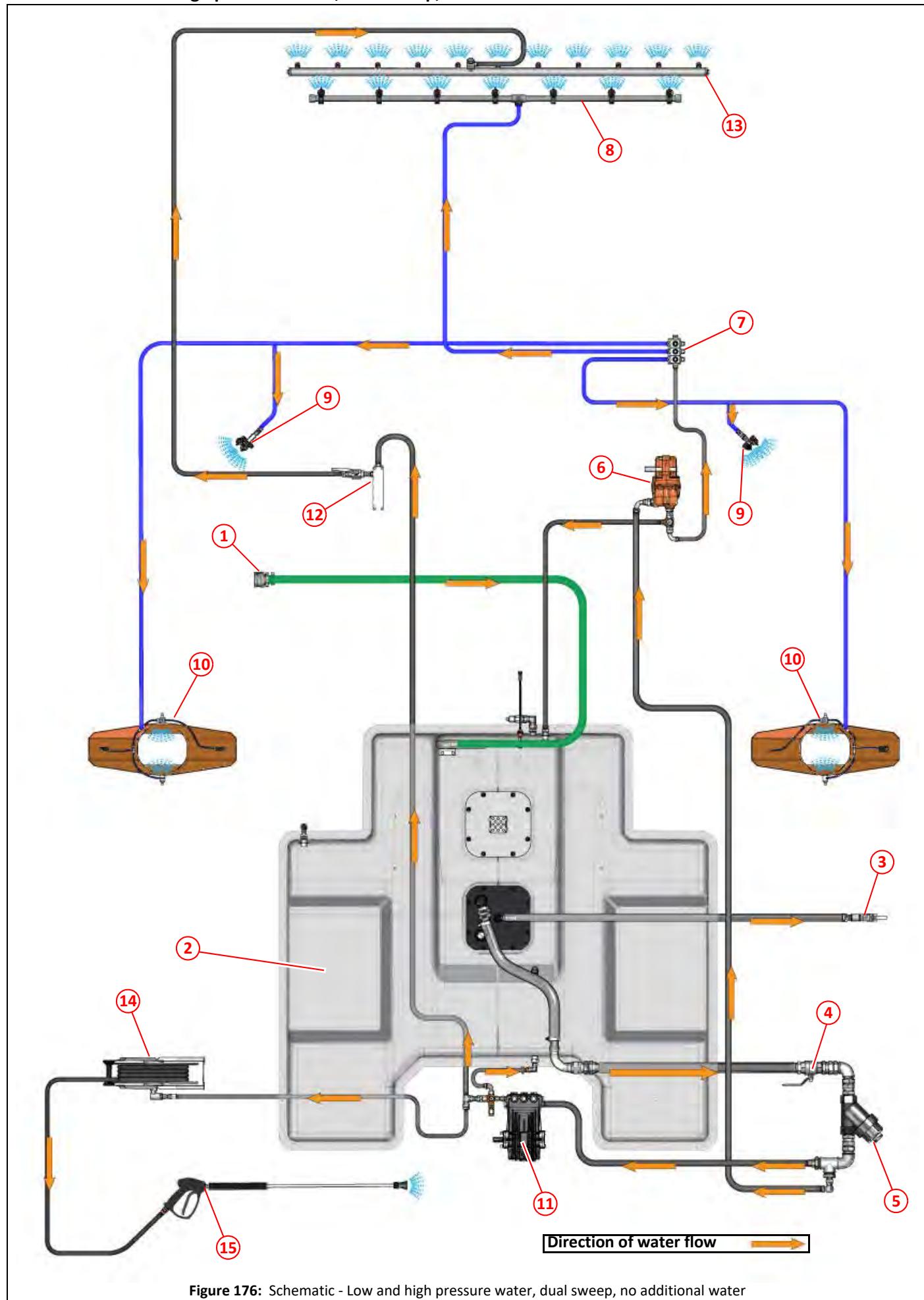


Figure 176: Schematic - Low and high pressure water, dual sweep, no additional water

| Item | Description                            |     |
|------|--|-----|
| ①    | Water filler                           |     |
| ②    | Water tank                             | 210 |
| ③    | Drain valve, water tank                | 216 |
| ④    | Valve, ball, 1½" BSP, low pressure     | 229 |
| ⑤    | Water strainer/filter                  | 229 |
| ⑥    | Water pump, low pressure               | 231 |
| ⑦    | Water control valves, low pressure     | 234 |
| ⑧    | Front spray bar, low pressure          | 240 |
| ⑨    | Side brush water jets, low pressure    | 237 |
| ⑩    | Suction nozzle box water, low pressure | 238 |
| ⑪    | Water pump, high pressure              | 242 |
| ⑫    | Manifold and valves, high pressure     | 246 |
| ⑬    | Front spray bar, high pressure         | 250 |
| ⑭    | Hose reel, high pressure               | 251 |
| ⑮    | Hand lance, high pressure              | 253 |

## Schematic - Low and high pressure water, dual sweep, with additional water

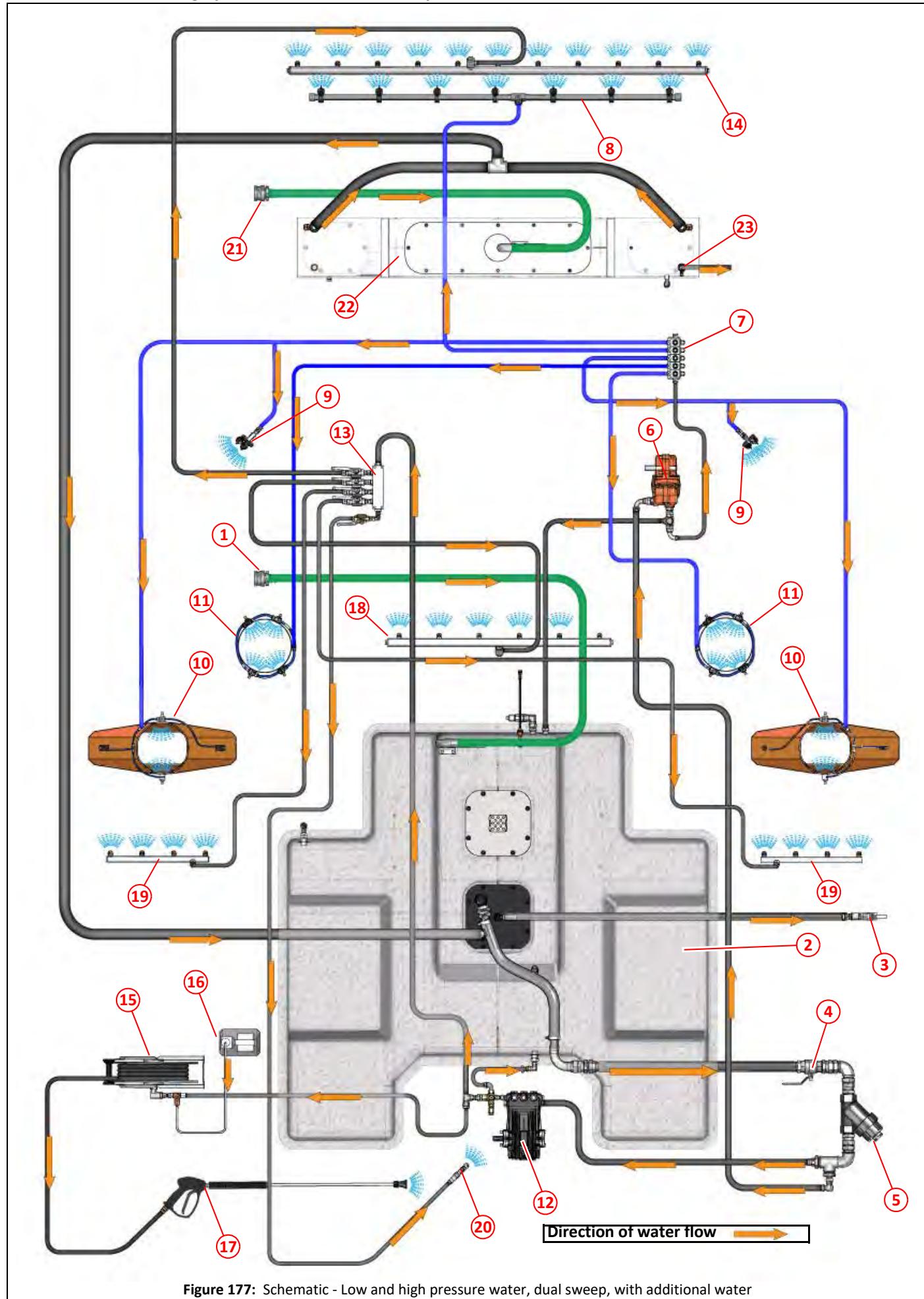
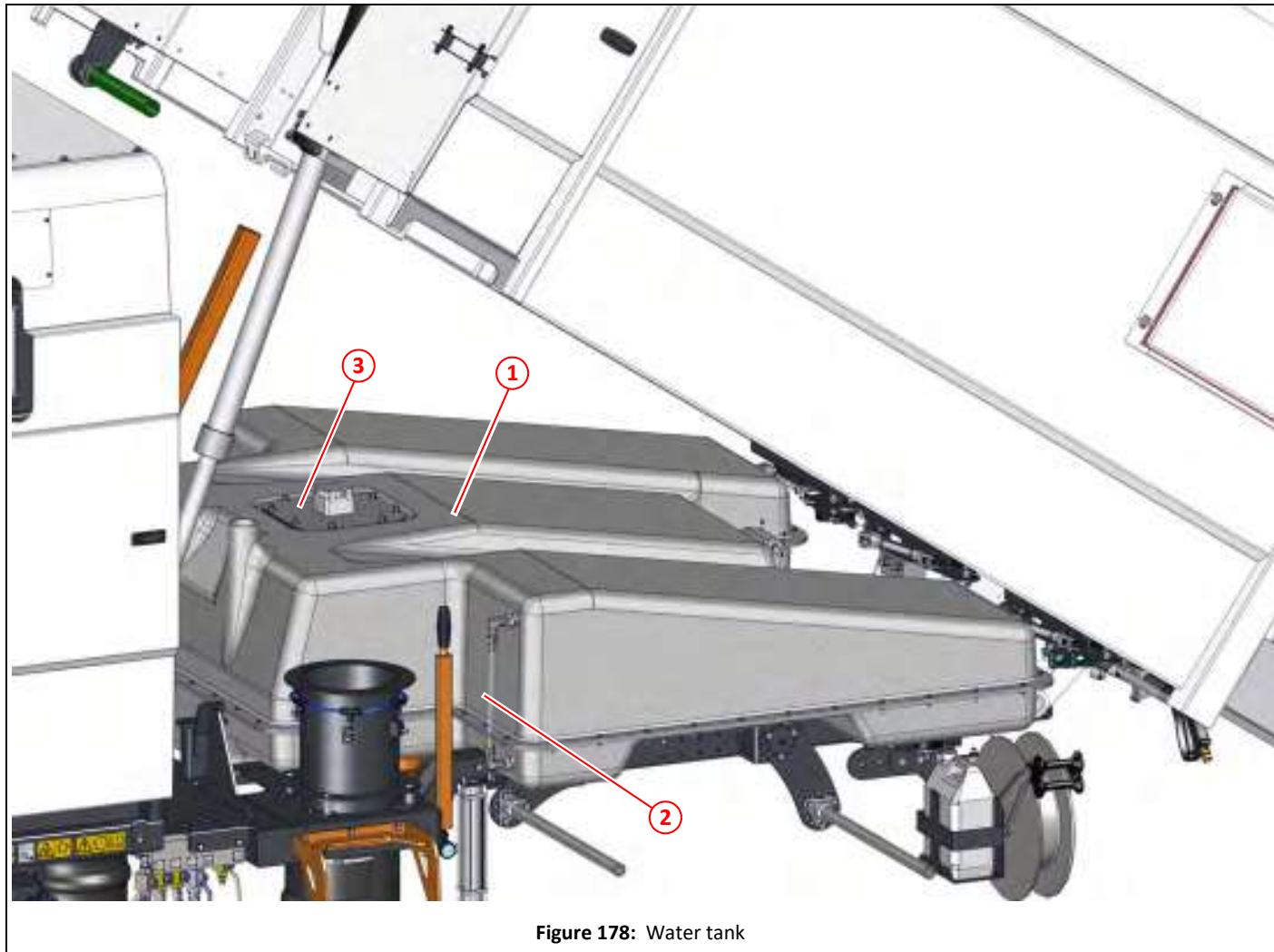


Figure 177: Schematic - Low and high pressure water, dual sweep, with additional water

| Item | Description                                  |         |
|------|--|---------|
| ①    | Water filler                                 |         |
| ②    | Water tank                                   | 210     |
| ③    | Drain valve, water tank                      | 216     |
| ④    | Valve, ball, 1½" BSP, low pressure           | 229     |
| ⑤    | Water strainer/filter                        | 229     |
| ⑥    | Water pump, low pressure                     | 231     |
| ⑦    | Water control valves, low pressure           | 234     |
| ⑧    | Front spray bar, low pressure                | 240     |
| ⑨    | Side brush water jets, low pressure          | 237     |
| ⑩    | Suction nozzle box, low pressure             | 238     |
| ⑪    | Suction spigot, low pressure                 | 239     |
| ⑫    | Water pump, high pressure                    | 242     |
| ⑬    | Manifold and valves, high pressure           | 247     |
| ⑭    | Front spray bar, high pressure               | 250     |
| ⑮    | Hose reel, high pressure                     | 251     |
| ⑯    | Detergent bottle, for hand lance             | 252     |
| ⑰    | Hand lance, high pressure                    | 253     |
| ⑱    | Spray bar, central brush, high pressure      | 256     |
| ⑲    | Spray bar, suction nozzle box, high pressure | 254,255 |
| ⑳    | Fan wash assist, high pressure               | 257     |
| ㉑    | Water filler, auxiliary water tank           | 222     |
| ㉒    | Auxiliary water tank                         | 221     |
| ㉓    | Drain valve, auxiliary water tank            | 227     |

## Water tank



| Item | Part No | Qty | Description            | Page |
|------|---------|-----|------------------------|------|
| ①    | 050809  | 1   | Water tank             | 211  |
| ②    |         |     | Water level sight tube | 213  |
| ③    | 034760  | 1   | Lid water tank         | 214  |

## Water tank anti-vibration mounts

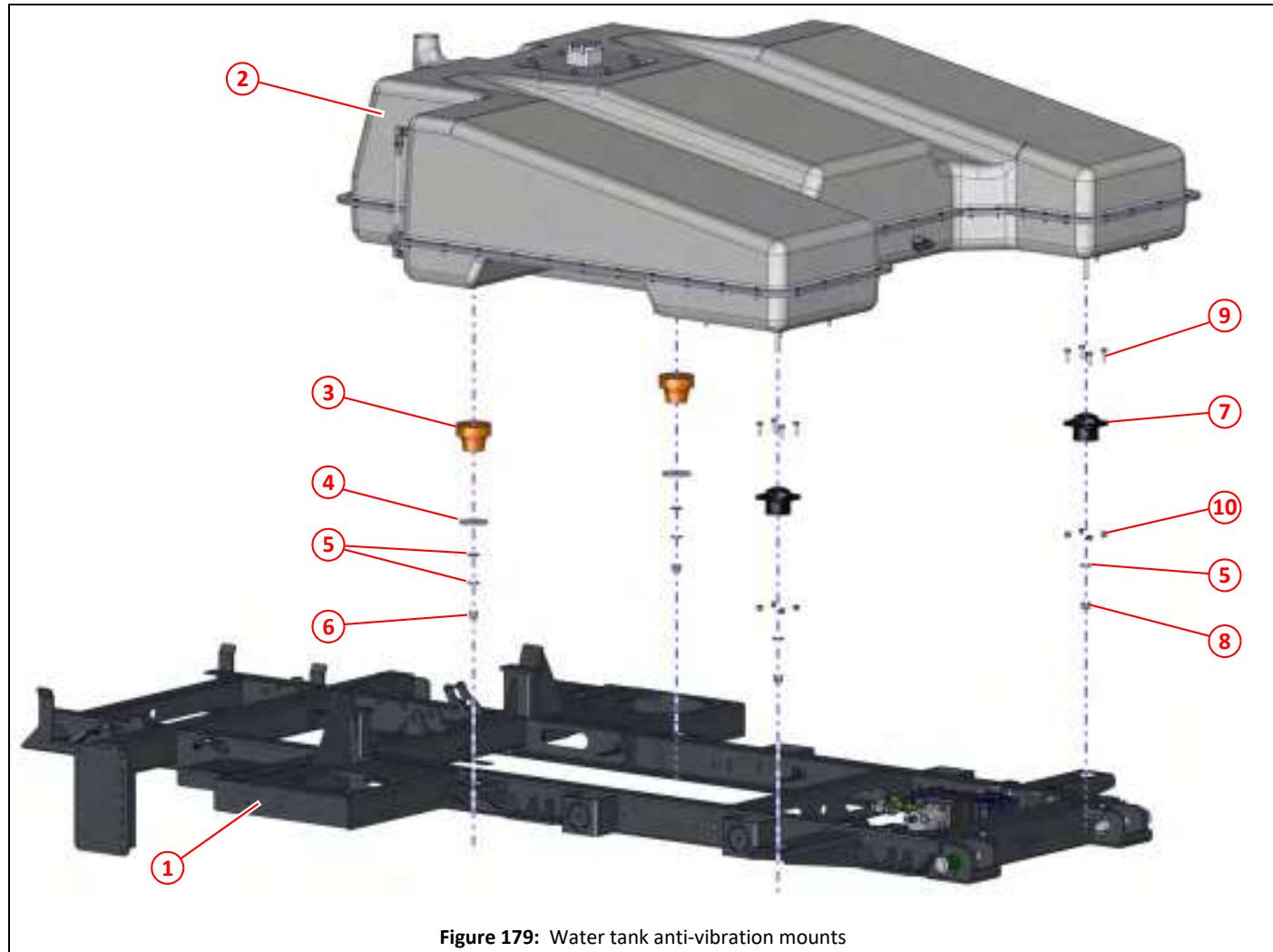


Figure 179: Water tank anti-vibration mounts

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 042942  | 1   | Subframe  |
| ②    | 050809  | 1   | Water tank  |
| ③    | 044509  | 2   | Bush, orange, water tank mount                          |
| ④    | 044623  | 2   | Washer ø16.5 x ø85 x 5                                  |
| ⑤    | 011135  | 6   | Plain washer M16  |
| ⑥    | 000493  | 2   | Nut, dome, M16, DIN 1587                                |
| ⑦    | 033838  | 2   | Mounting, anti-vibration, MS243/5 (HD type), water tank |
| ⑧    | 011060  | 2   | Nyloc nut T M16   |
| ⑨    | 011032  | 8   | Setscrew M10 x 30                                       |
| ⑩    | 011075  | 8   | Nyloc nut T M10   |

## Water tank mounting support plates

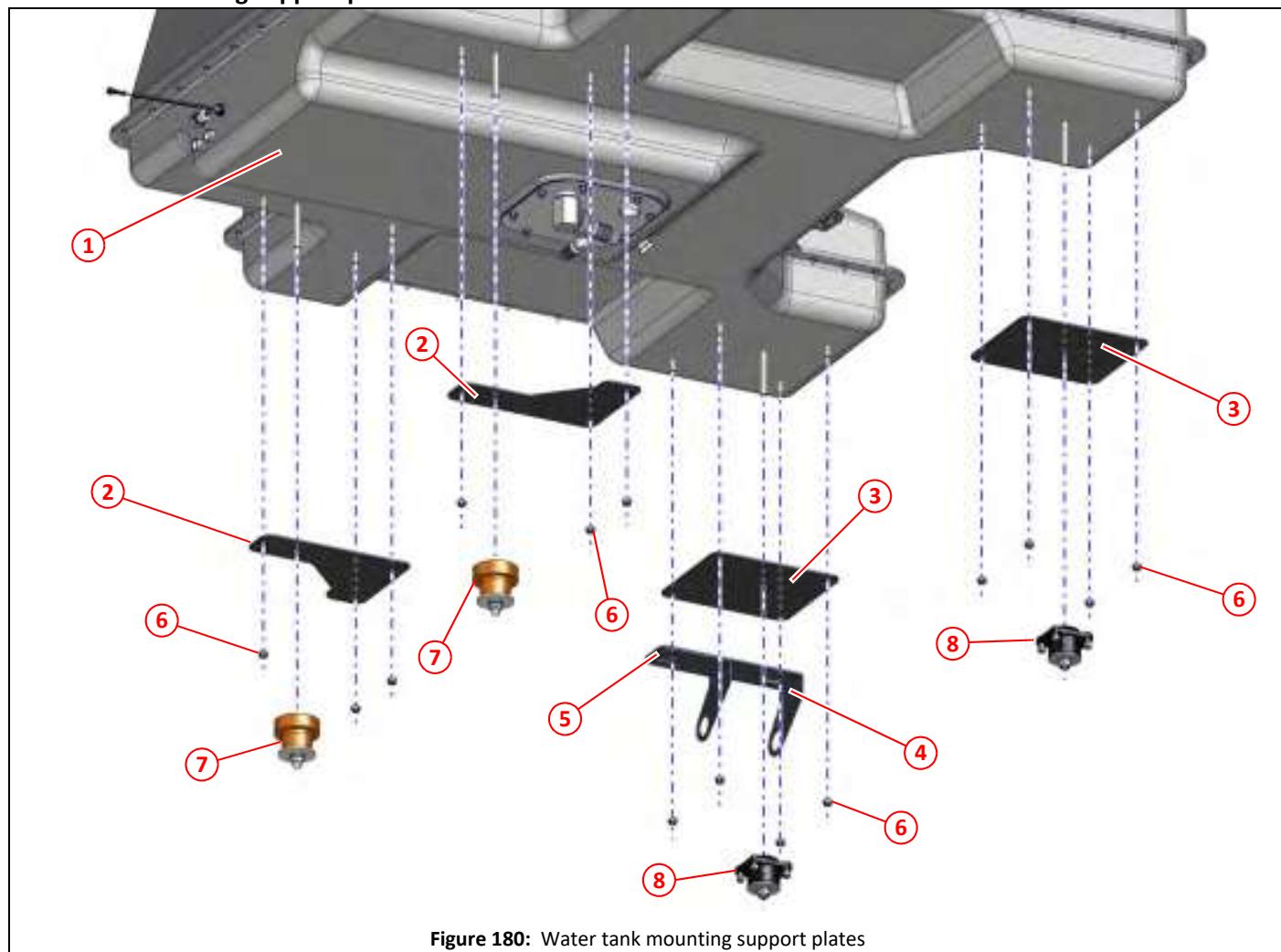
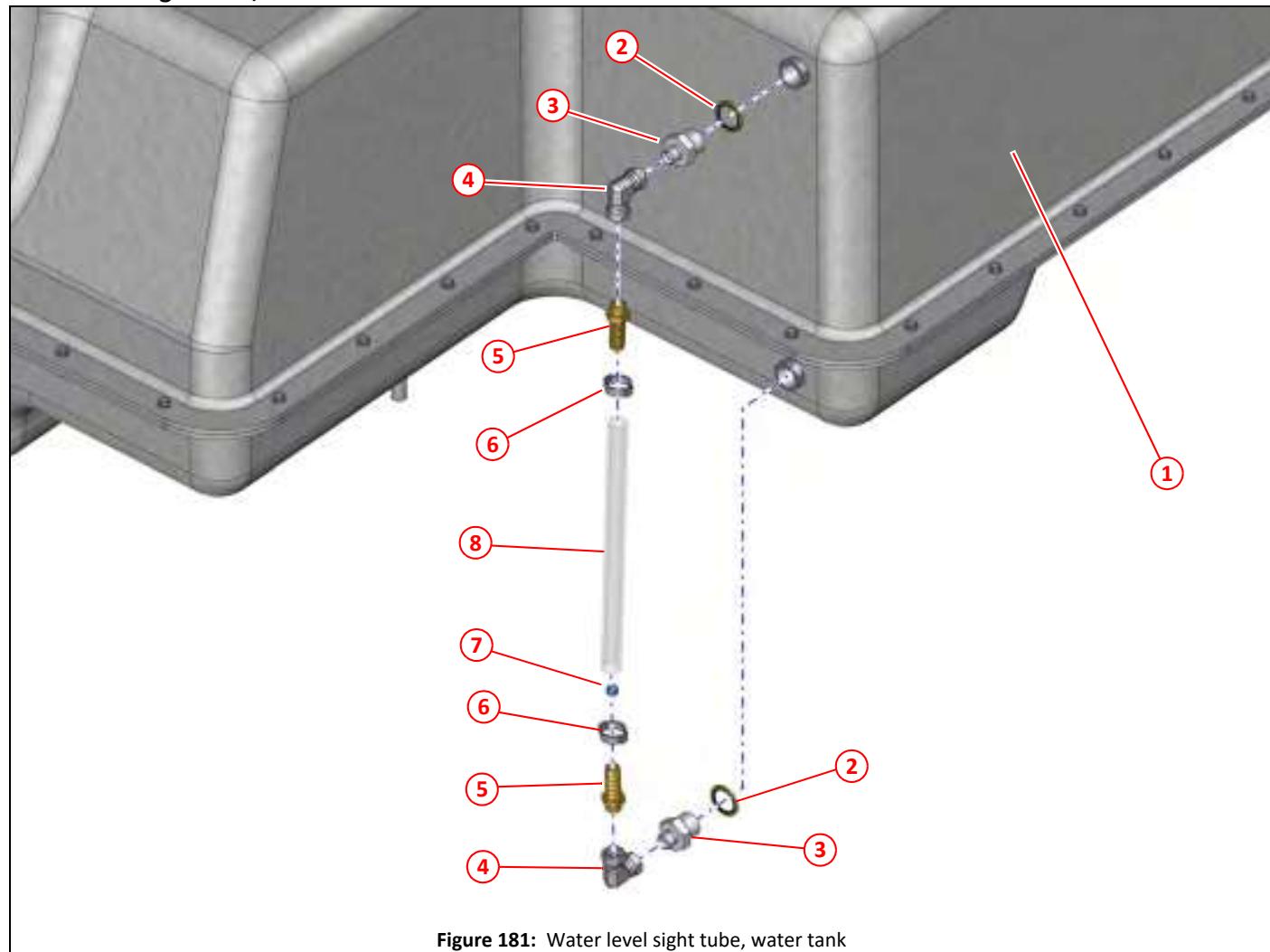


Figure 180: Water tank mounting support plates

| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| ①    | 050809  | 1   | Water tank  | 211 |
| ②    | 034871  | 2   | Support plate, front                                    |     |
| ③    | 034872  | 2   | Support plate, rear                                     |     |
| ④    | 047426  | 1   | Water filter bracket 1                                  | 229 |
| ⑤    | 047427  | 1   | Water filter bracket 2                                  | 229 |
| ⑥    | 011077  | 14  | Nyloc nut T M12   |     |
| ⑦    | 044509  | 2   | Bush, orange, water tank mount                          | 211 |
| ⑧    | 033838  | 2   | Mounting, anti-vibration, MS243/5 (HD type), water tank | 211 |

**Water level sight tube, water tank**

**Figure 181:** Water level sight tube, water tank

| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| ①    | 050809  | 1   | Water tank  | 211 |
| ②    | 011155  | 2   | Dowty seal, $\frac{3}{4}$ " BSP                         |     |
| ③    | 011224  | 2   | Adapter $\frac{3}{4}$ " x $\frac{3}{8}$ " BSP           |     |
| ④    | 011205  | 2   | Elbow, swivel, female/female $\frac{3}{8}$ " BSP        |     |
| ⑤    | 010930  | 2   | Adapter $\frac{3}{8}$ " BSP x $\frac{5}{8}$ " hose tail |     |
| ⑥    | 000202  | 2   | O-clip $\frac{7}{8}$ "                                  |     |
| ⑦    | 025335  | 1   | Ball, plastic, $\frac{1}{2}$ "                          |     |
| ⑧    | 040424  | 1   | PVC tube, clear, $\frac{5}{8}$ ", cut to 300mm          |     |

## Lid, water tank

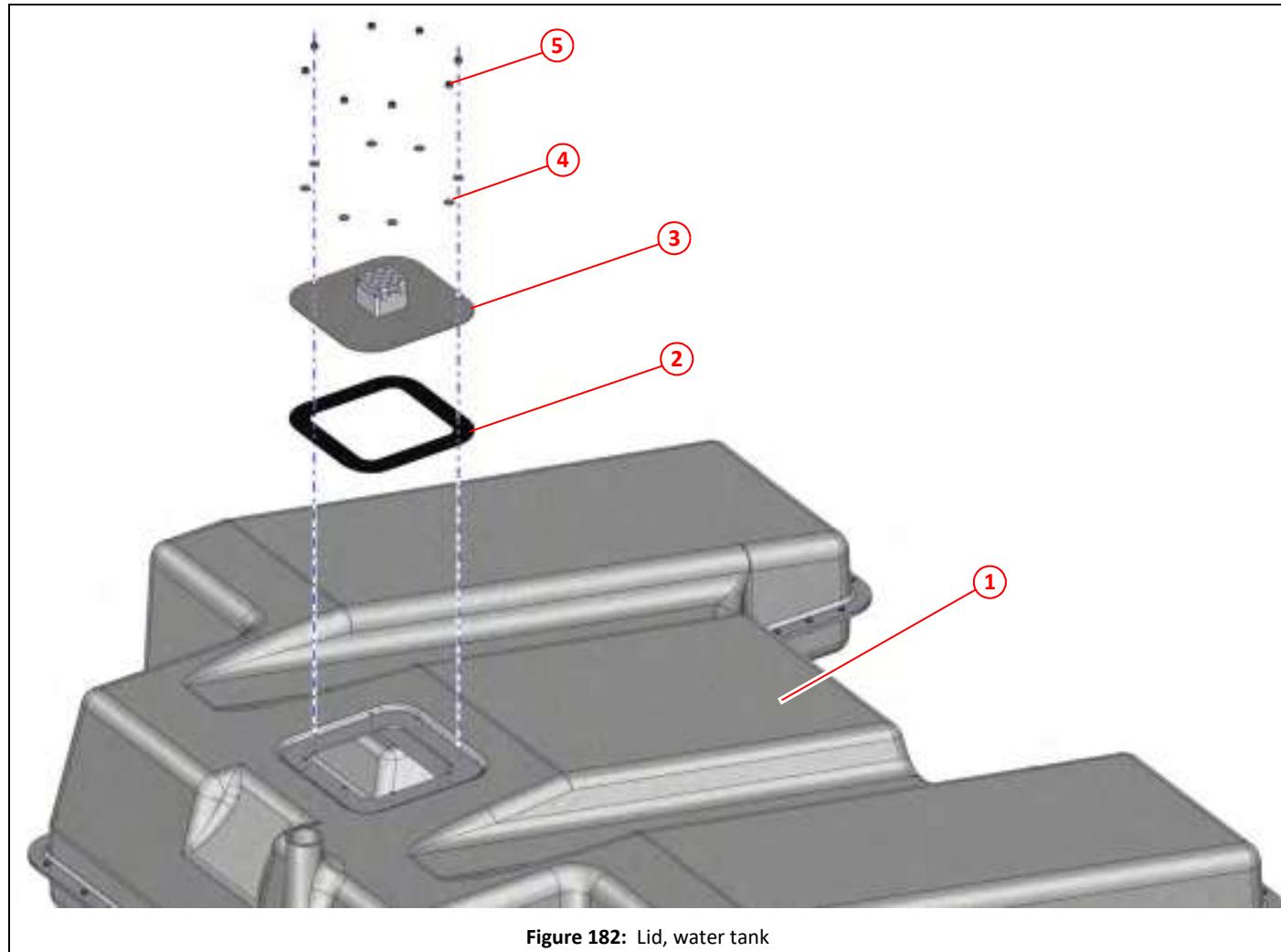


Figure 182: Lid, water tank

| Item | Part No | Qty | Description                     |     |
|------|---------|-----|---------------------------------|-----|
| ①    | 050809  | 1   | Water tank                      | 211 |
| ②    | 034873  | 1   | Gasket, water tank lid/sump     |     |
| ③    | 034760  | 1   | Lid, water tank                 |     |
| ④    | 000264  | 8   | Washer M8, stainless steel      |     |
| ⑤    | 000263  | 8   | Nyloc nut T M8, stainless steel |     |

## Fittings, water tank, front

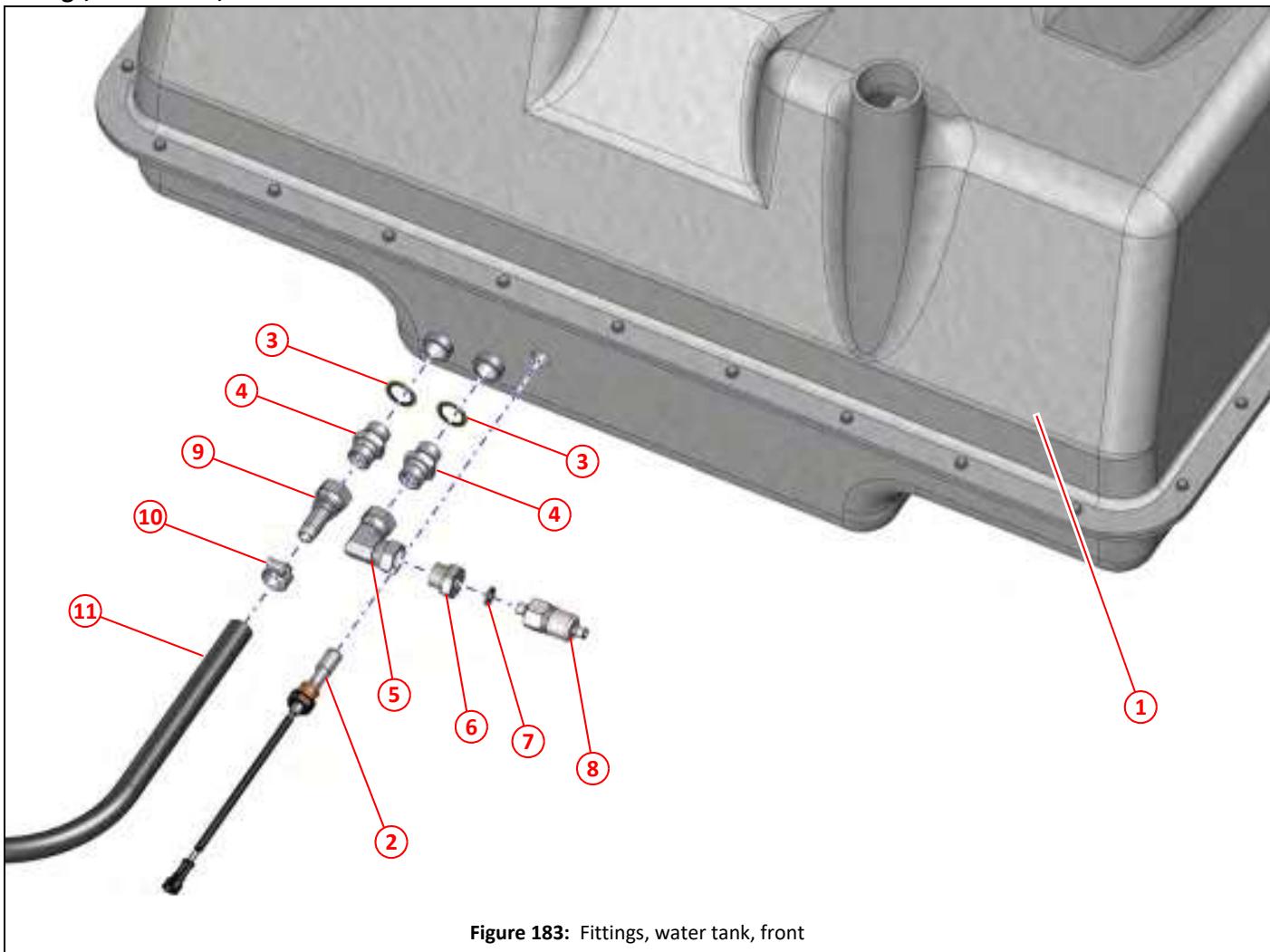
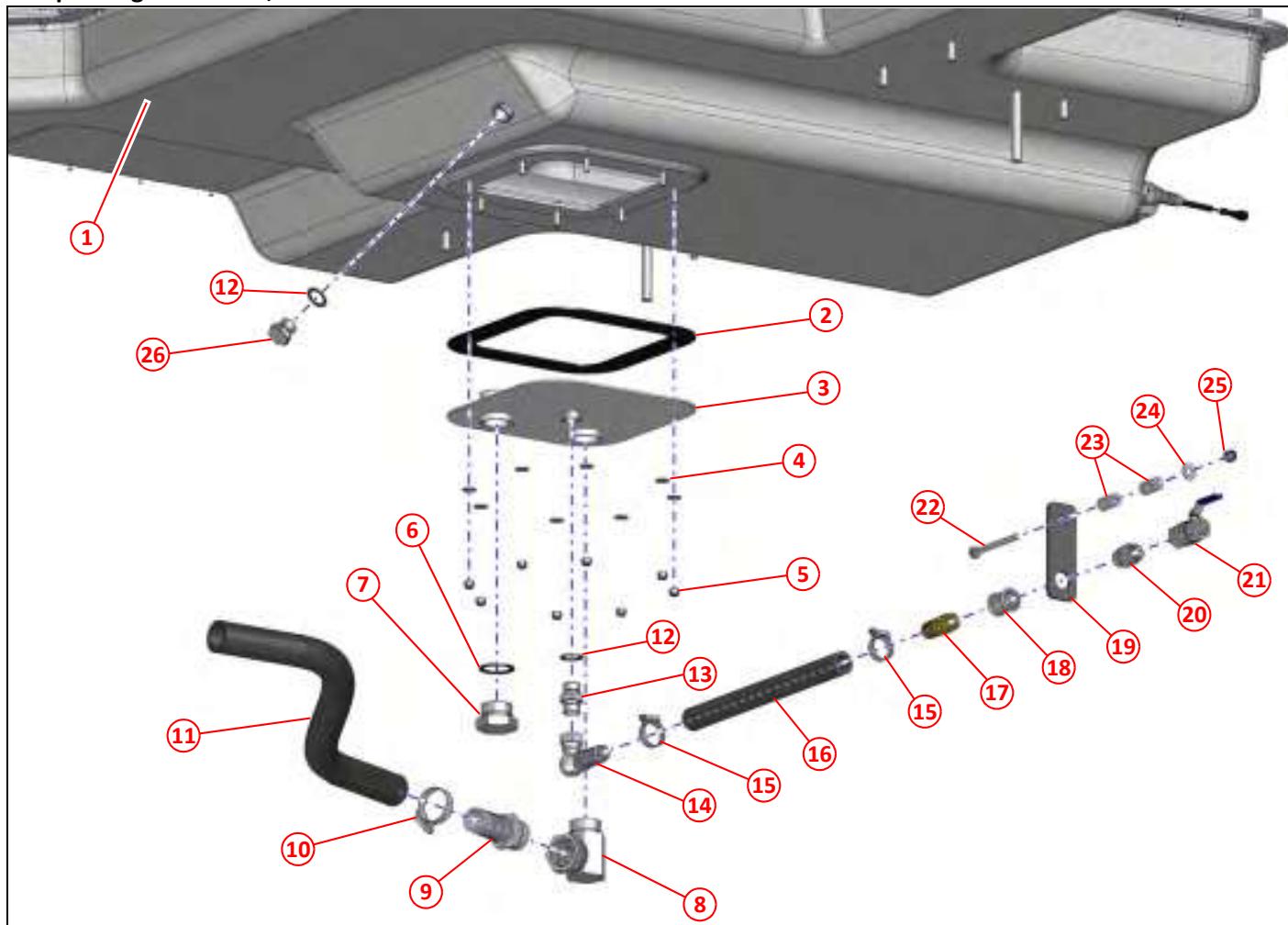


Figure 183: Fittings, water tank, front

| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| ①    | 050809  | 1   | Water tank  | 211 |
| ②    | 036871  | 1   | Float switch with AMP plug  |     |
| ③    | 011155  | 2   | Dowty seal, $\frac{3}{4}$ " BSP   |     |
| ④    | 011161  | 2   | Adapter $\frac{3}{4}$ " BSP   |     |
| ⑤    | 011213  | 1   | Elbow, swivel, $\frac{3}{4}$ " BSP  |     |
| ⑥    | 021524  | 1   | Plug, reducing, $\frac{3}{4}$ " BSP x $\frac{1}{4}$ " BSP                     |     |
| ⑦    | 011152  | 1   | Dowty seal, $\frac{1}{4}$ " BSP   |     |
| ⑧    | 047885  | 1   | Pressure sensor, 0 - 250mBar, $\frac{1}{4}$ " BSP male                        |     |
| ⑨    | 002249  | 1   | Adapter, straight, $\frac{3}{4}$ " BSP x $\frac{3}{4}$ " hose tail            |     |
| ⑩    | 010518  | 1   | Jubilee clip No. 1X [ $\varnothing$ 30 - $\varnothing$ 40]                    |     |
| ⑪    | 002188  | 1   | Hose $\frac{3}{4}$ " R6, cut to required length, from low pressure water pump |     |

## Sump fittings and drain, water tank



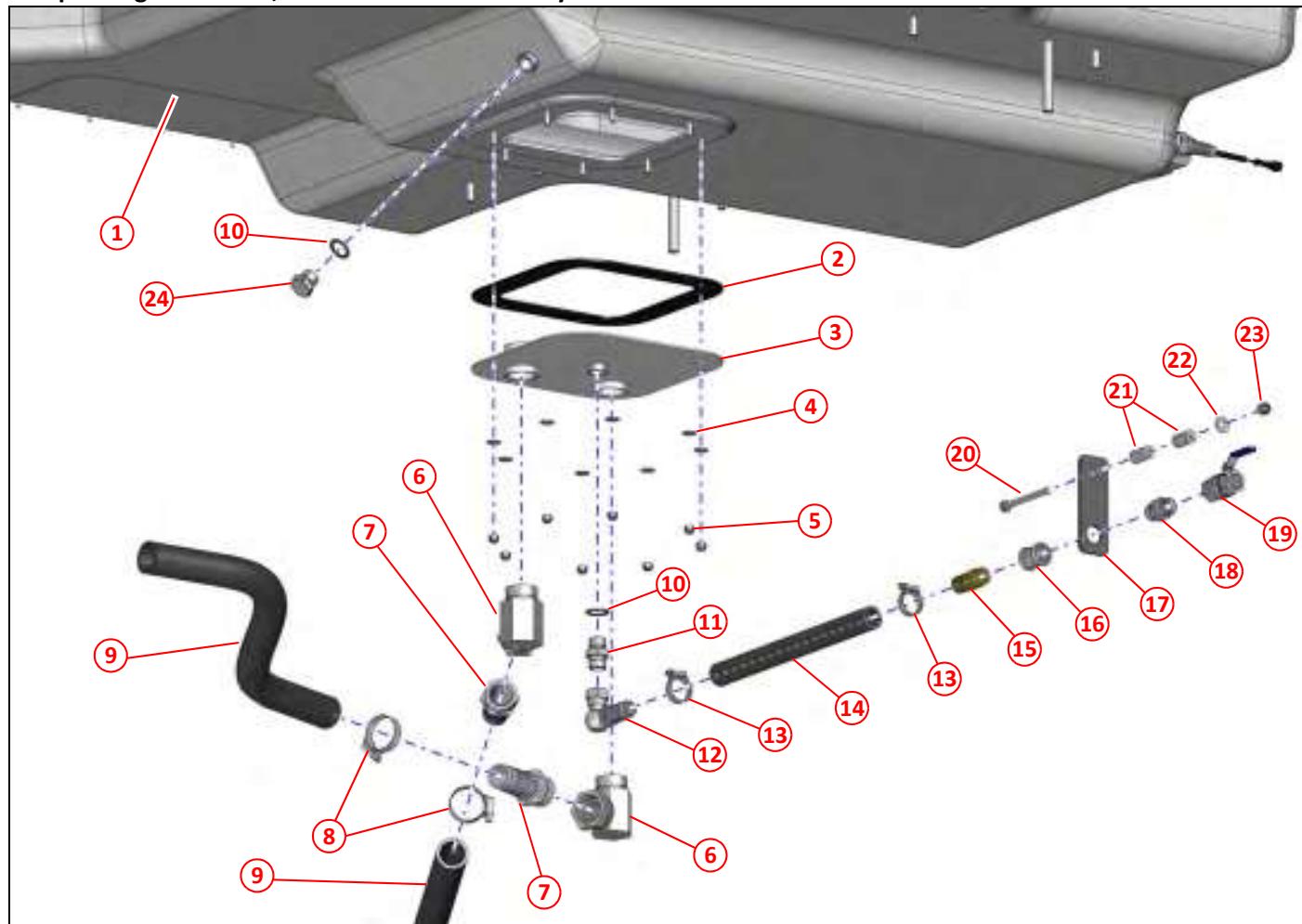
**i** The sump plate could be in any orientation depending on the chassis being used. Fittings will be the same, but hose lengths could change.

Figure 184: Sump fittings and drain, water tank

| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    | 050809  | 1   | Water tank   | 211 |
| ②    | 034873  | 1   | Gasket, water tank, lid/sump   |     |
| ③    | 046844  | 1   | Sump plate, water tank, large feed                                     |     |
| ④    | 000264  | 8   | Washer M8, stainless steel   |     |
| ⑤    | 000263  | 8   | Nyloc nut T M8, stainless steel  |     |
| ⑥    | 002072  | 1   | Dowty seal, 1½" BSP  |     |
| ⑦    | 002231  | 1   | Plug, 1½" BSP  |     |
| ⑧    | 002286  | 1   | Elbow, male with swivel female, 1½" BSP                                |     |
| ⑨    | 002051  | 1   | Adapter, straight, 1½" BSP x 1½" hose tail                             |     |
| ⑩    | 005081  | 1   | Jubilee clip, high torque, size 50 ø30-ø50                             |     |
| ⑪    | 045968  | 1   | Hose, SD MEGAFLEX, ø1½" ø38mm, cut to required length, to water filter |     |
| ⑫    | 011155  | 2   | Dowty seal, ¾" BSP   |     |
| ⑬    | 011161  | 1   | Adapter, ¾" BSP  |     |
| ⑭    | 002203  | 1   | Elbow, ¾" BSPP to 1" hose tail   |     |
| ⑮    | 010518  | 2   | Jubilee clip No. 1X [ø30 - ø40]  |     |
| ⑯    | 010959  | 1   | Hose 1", fuel, cut to required length                                  |     |
| ⑰    | 010931  | 1   | Adapter, ¾" BSP x 1" hose tail   |     |
| ⑱    | 010934  | 1   | Socket, ¾" BSP   |     |

| Item | Part No | Qty | Description                            |  |
|------|---------|-----|--|--|
| ⑯    | 021848  | 1   | Bracket, water tank drain tap mounting |  |
| ㉐    | 011161  | 1   | Adapter, $\frac{3}{4}$ " BSP           |  |
| ㉑    | 013757  | 1   | Valve, ball, $\frac{3}{4}$ " BSP       |  |
| ㉒    | 011042  | 1   | Bolt, HT, M10 x 110                    |  |
| ㉓    | 037723  | 2   | Spacer, ø11 x ø20 x 35.5               |  |
| ㉔    | 000270  | 1   | Washer M10, stainless steel            |  |
| ㉕    | 000269  | 1   | Nyloc nut T M10, stainless steel       |  |
| ㉖    | 011244  | 1   | Plug $\frac{3}{4}$ " BSP               |  |

## Sump fittings and drain, water tank with auxiliary water tank



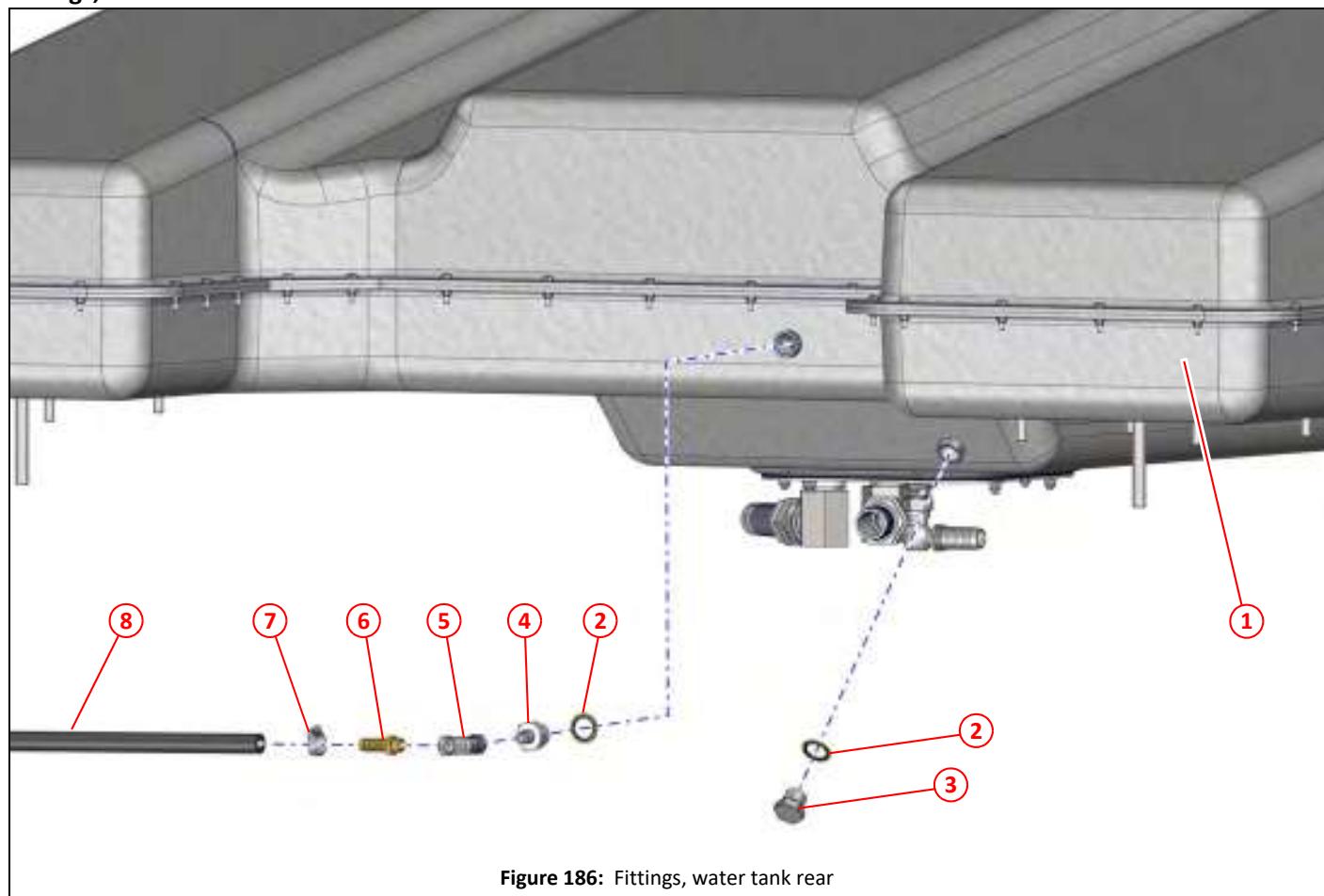
**i** The sump plate could be in any orientation depending on the chassis being used. Fittings will be the same, but hose lengths could change.

Figure 185: Sump fittings and drain, water tank with auxiliary water tank

| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| ①    | 050809  | 1   | Water tank  | 211 |
| ②    | 034873  | 1   | Gasket, water tank, lid/sump                          |     |
| ③    | 046844  | 1   | Sump plate, water tank, large feed                    |     |
| ④    | 000264  | 8   | Washer M8, stainless steel                            |     |
| ⑤    | 000263  | 8   | Nyloc nut T M8, stainless steel                       |     |
| ⑥    | 002286  | 2   | Elbow, male with swivel female, 1½" BSP               |     |
| ⑦    | 002051  | 2   | Adapter, straight, 1½" BSP x 1½" hose tail            |     |
| ⑧    | 005081  | 2   | Jubilee clip, high torque, size 50 [Ø30-Ø50]          |     |
| ⑨    | 045968  | 2   | Hose, SD MEGAFLEX, Ø1½" Ø38mm, cut to required length |     |
| ⑩    | 011155  | 2   | Dowty seal, ¾" BSP                                    |     |
| ⑪    | 011161  | 1   | Adapter, ¾" BSP                                       |     |
| ⑫    | 002203  | 1   | Elbow, ¾" BSPP to 1" hose tail                        |     |
| ⑬    | 010518  | 2   | Jubilee clip No. 1X [Ø30 - Ø40]                       |     |
| ⑭    | 010959  | 1   | Hose 1", fuel, cut to required length                 |     |
| ⑮    | 010931  | 1   | Adapter, ¾" BSP x 1" hose tail                        |     |
| ⑯    | 010934  | 1   | Socket, ¾" BSP  |     |
| ⑰    | 021848  | 1   | Bracket, water tank drain tap mounting                |     |
| ⑱    | 011161  | 1   | Adapter, ¾" BSP                                       |     |

| Item | Part No | Qty | Description  |  |
|------|---------|-----|--|--|
| ⑯    | 013757  | 1   | Valve, ball, $\frac{3}{4}''$ BSP                           |  |
| ㉐    | 011042  | 1   | Bolt, HT, M10 x 110  |  |
| ㉑    | 037723  | 2   | Spacer, $\varnothing 11 \times \varnothing 20 \times 35.5$ |  |
| ㉒    | 000270  | 1   | Washer M10, stainless steel                                |  |
| ㉓    | 000269  | 1   | Nyloc nut T M10, stainless steel                           |  |
| ㉔    | 011244  | 1   | Plug, $\frac{3}{4}''$ BSP                                  |  |

## Fittings, water tank rear



| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    | 050809  | 1   | Water tank   | 211 |
| ②    | 011155  | 2   | Dowty seal, $\frac{3}{4}$ " BSP  |     |
| ③    | 011244  | 1   | Plug, $\frac{3}{4}$ " BSP  |     |
| ④    | 011224  | 1   | Adapter, $\frac{3}{4}$ " x $\frac{3}{8}$ " BSP                                   |     |
| ⑤    | 011205  | 1   | Elbow, swivel, female/female $\frac{3}{8}$ " BSP                                 |     |
| ⑥    | 010930  | 1   | Adapter, $\frac{3}{8}$ " BSP x $\frac{5}{8}$ " hose tail                         |     |
| ⑦    | 010517  | 1   | Jubilee clip, No. 0X [ $\varnothing$ 18 - $\varnothing$ 25]                      |     |
| ⑧    | 011000  | 1   | Hose, $\frac{5}{8}$ ", fuel SAE100R6, cut to length required, from HP water pump |     |

## Auxiliary water tank, 650 litre (172 US gallons), mounting location

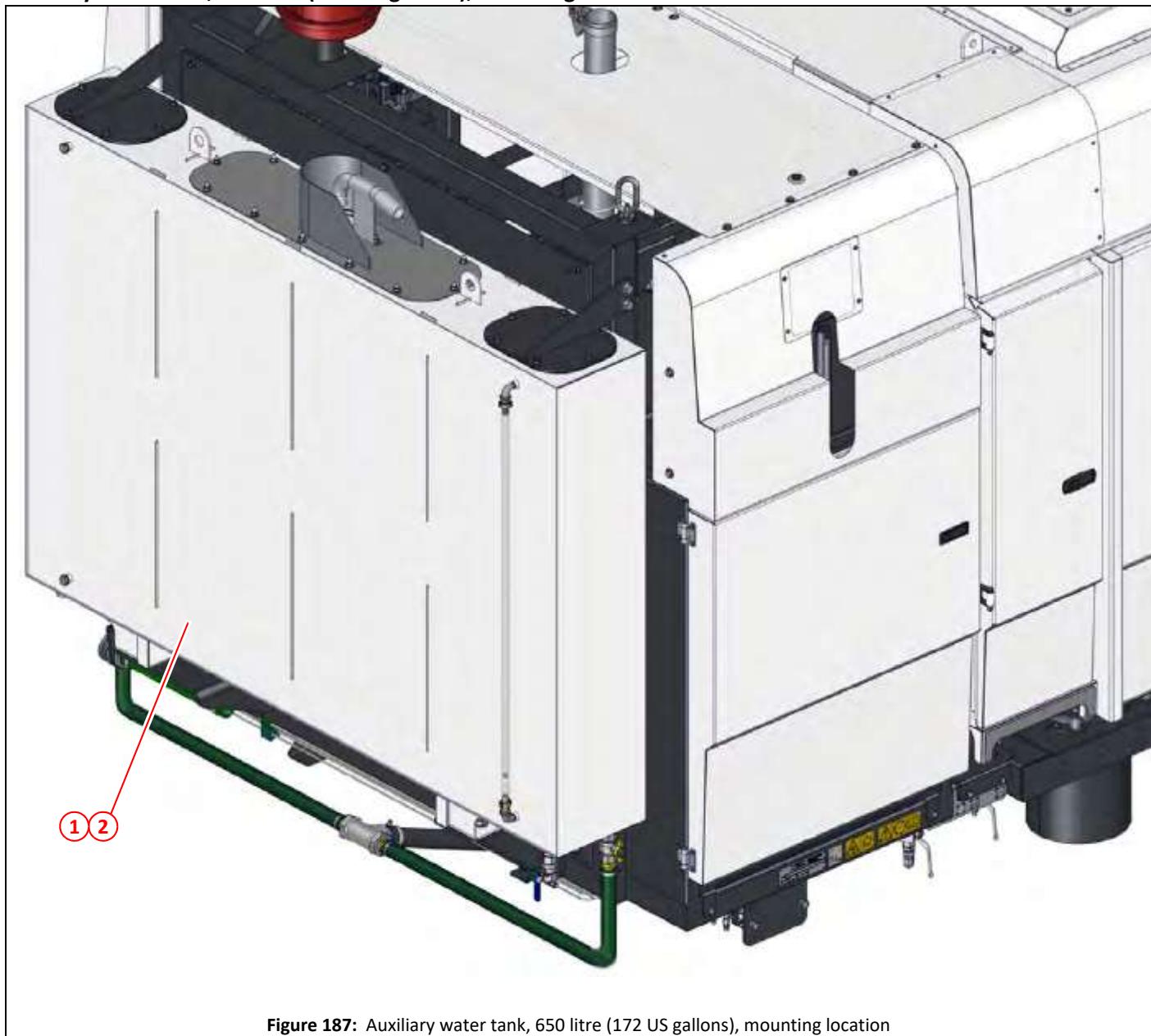


Figure 187: Auxiliary water tank, 650 litre (172 US gallons), mounting location

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| (1)  | 043134  | 1   | Auxiliary water tank 650 litre (US 172 gallons), with fittings |
| (2)  | 043104  | 1   | Auxiliary water tank 650 litre (US 172 gallons), no fittings   |

## Auxiliary water tank arrangement

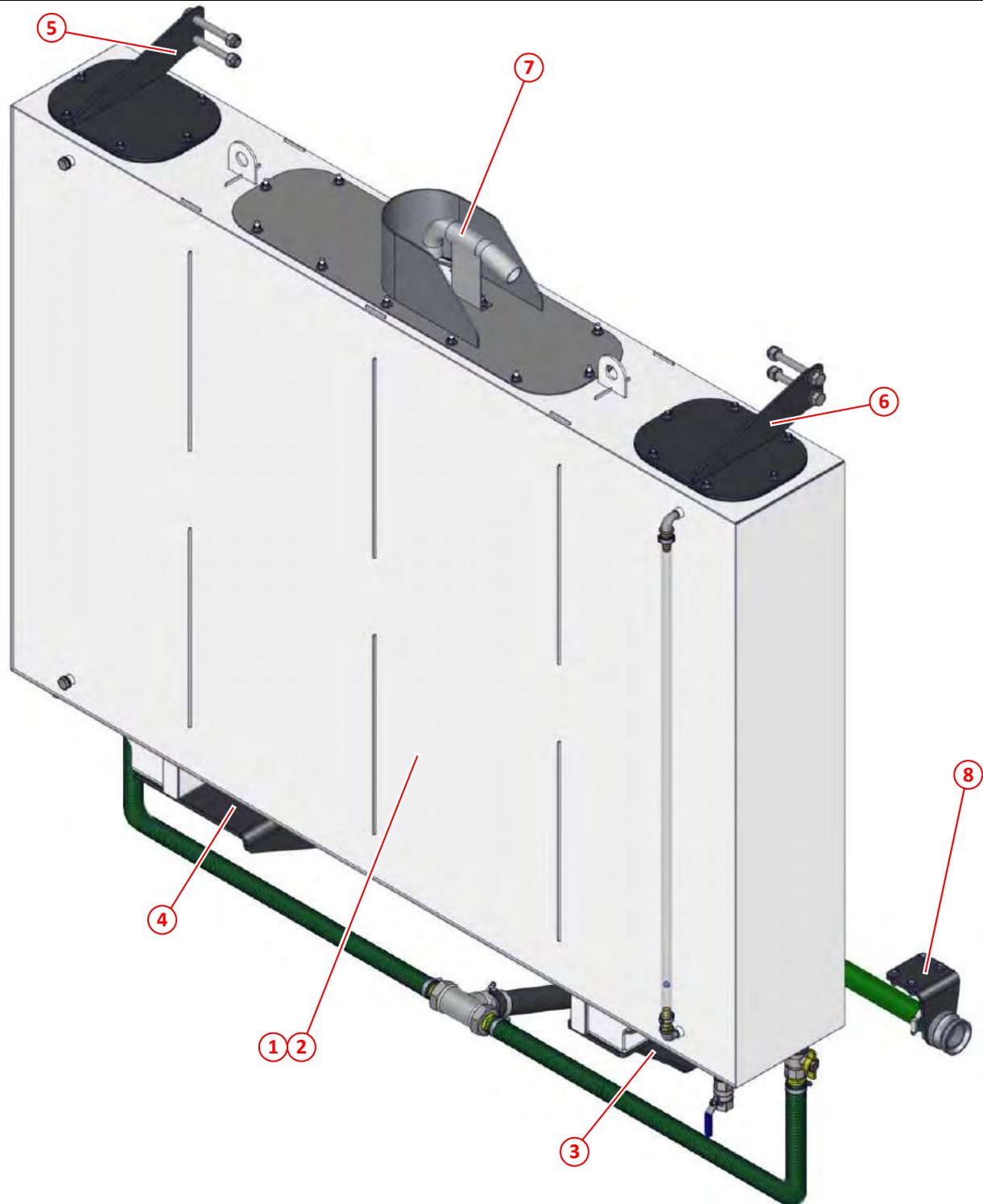
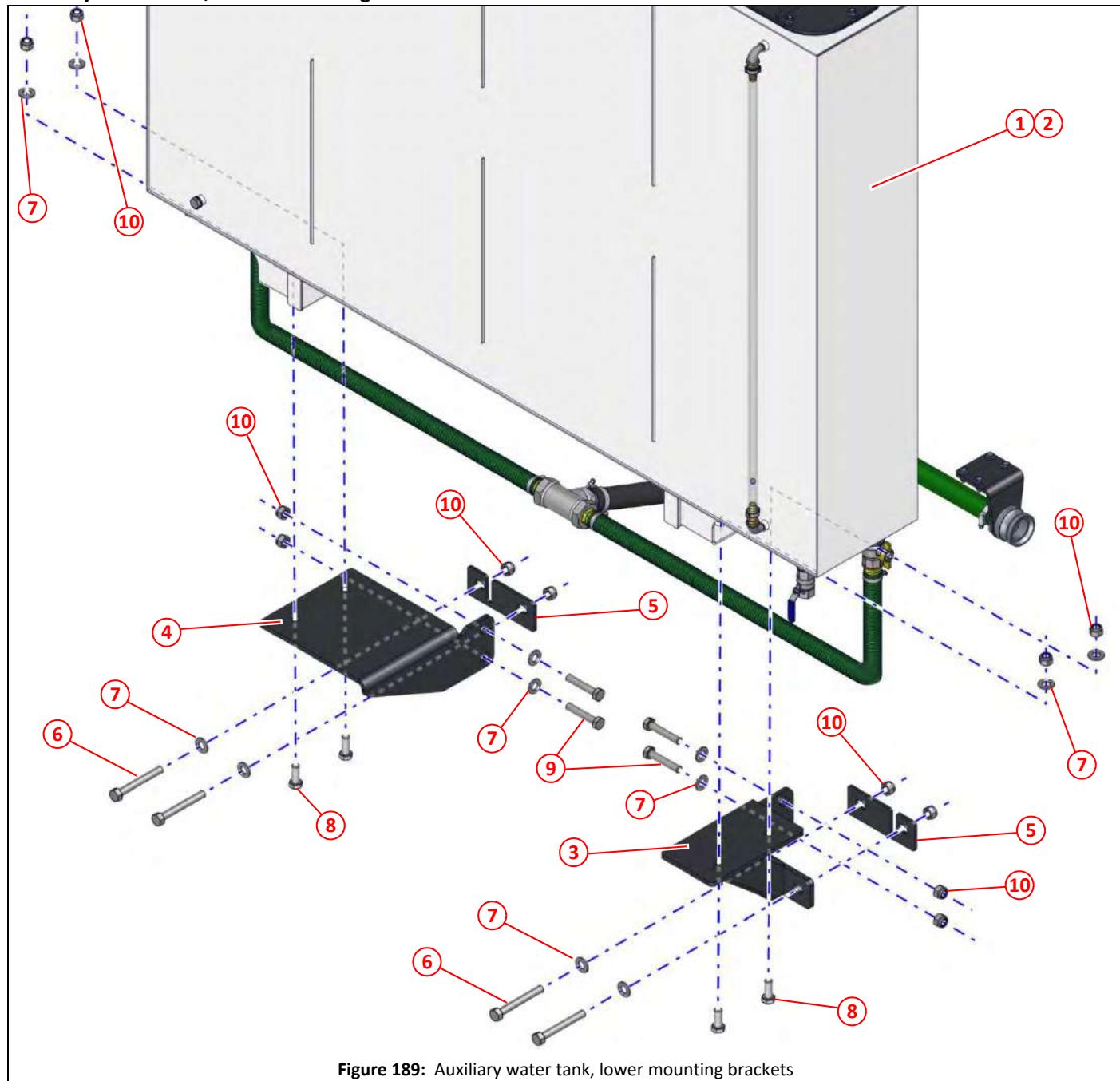


Figure 188: Auxiliary water tank arrangement

| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    | 043134  | 1   | Auxiliary water tank 650 litre (US 172 gallons), with fittings |     |
| ②    | 043104  | 1   | Auxiliary water tank 650 litre (US 172 gallons), no fittings   |     |
| ③    | 043135  | 1   | Mounting bracket, left hand, auxiliary water tank              | 223 |
| ④    | 043136  | 1   | Mounting Bracket, right hand, auxiliary water tank             | 223 |
| ⑤    | 045153  | 1   | Brace, right hand, auxiliary water tank                        | 224 |
| ⑥    | 045154  | 1   | Brace, left hand, auxiliary water tank                         | 224 |
| ⑦    | 024586  | 1   | Tank filler pipe   |     |
| ⑧    |         |     | Hydrant filler, can be on either side of the sweeper           | 228 |

## Auxiliary water tank, lower mounting brackets



| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 043134  | 1   | Auxiliary water tank 650 litre (US 172 gallons), with fittings |
| ②    | 043104  | 1   | Auxiliary water tank 650 litre (US 172 gallons), no fittings   |
| ③    | 043135  | 1   | Mounting bracket, left hand, auxiliary water tank              |
| ④    | 043136  | 1   | Mounting Bracket, right hand, auxiliary water tank             |
| ⑤    | 045127  | 2   | Water tank plate   |
| ⑥    | 000184  | 4   | Bolt M16 x 120 grade 10.9, plated                              |
| ⑦    | 011135  | 12  | Washer M61   |
| ⑧    | 000386  | 4   | Bolt M16 x 40 x 1.5 pitch                                      |
| ⑨    | 011261  | 4   | Bolt M16 x 80  |
| ⑩    | 011060  | 12  | Nyloc nut T M16  |

## Auxiliary water tank, upper mounting braces

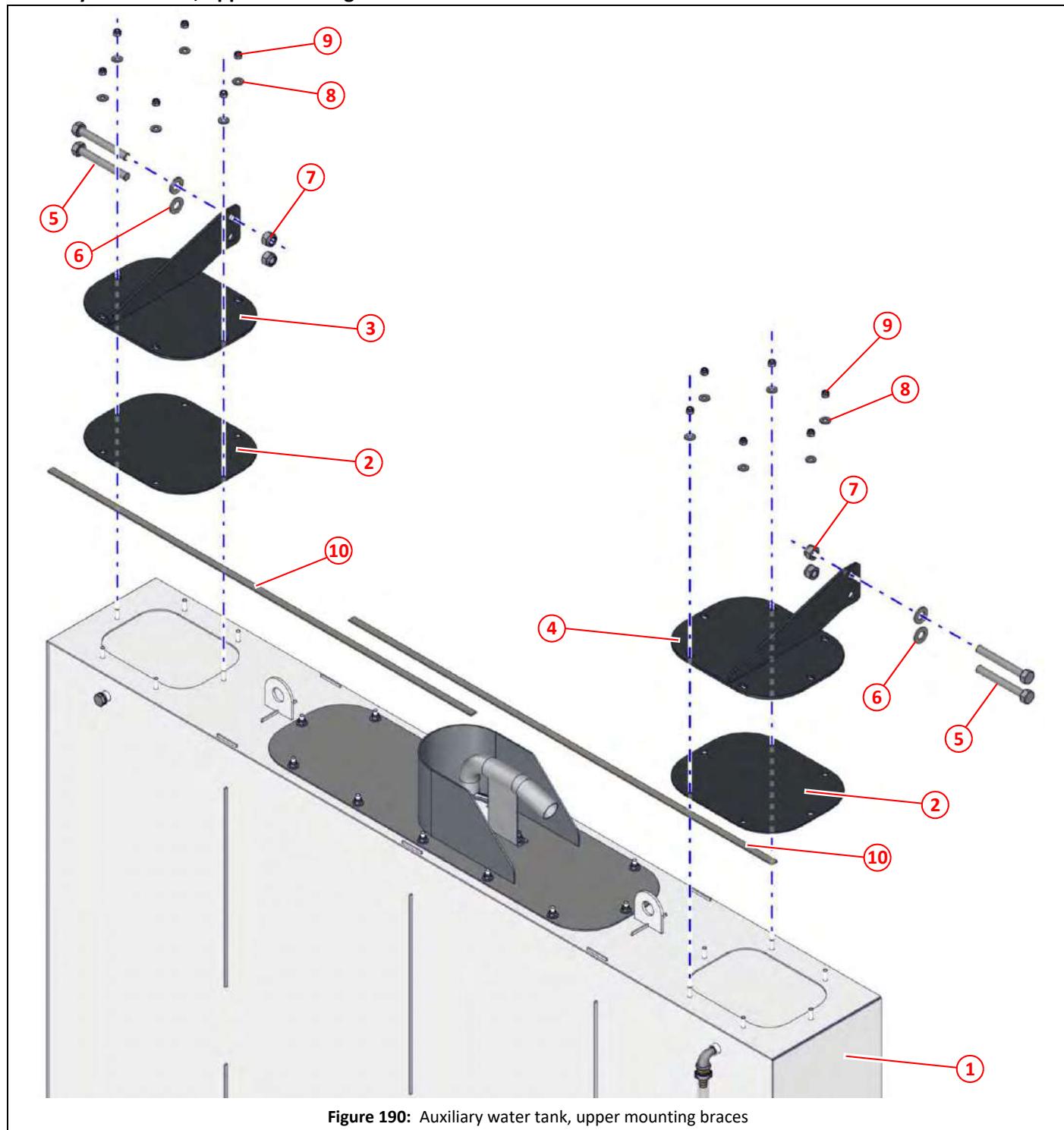


Figure 190: Auxiliary water tank, upper mounting braces

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 043104  | 1   | Auxiliary water tank 650 litre (US 172 gallons), no fittings |
| ②    | 039877  | 2   | Auxiliary water tank lid, small                              |
| ③    | 045153  | 1   | Brace, right hand, auxiliary water tank                      |
| ④    | 045154  | 1   | Brace, left hand, auxiliary water tank                       |
| ⑤    | 000184  | 4   | Bolt M16 x 120, grade 10.9, plated                           |
| ⑥    | 011135  | 4   | Washer M16   |
| ⑦    | 011060  | 4   | Nyloc nut T M16  |
| ⑧    | 000264  | 12  | Washer M8, stainless steel                                   |
| ⑨    | 000263  | 12  | Nyloc nut T M8, stainless steel                              |
| ⑩    | 020362  | 2   | Inseal strip 3 x 15, cut to 1110, placed under small lids    |

## Auxiliary water tank, filler lid

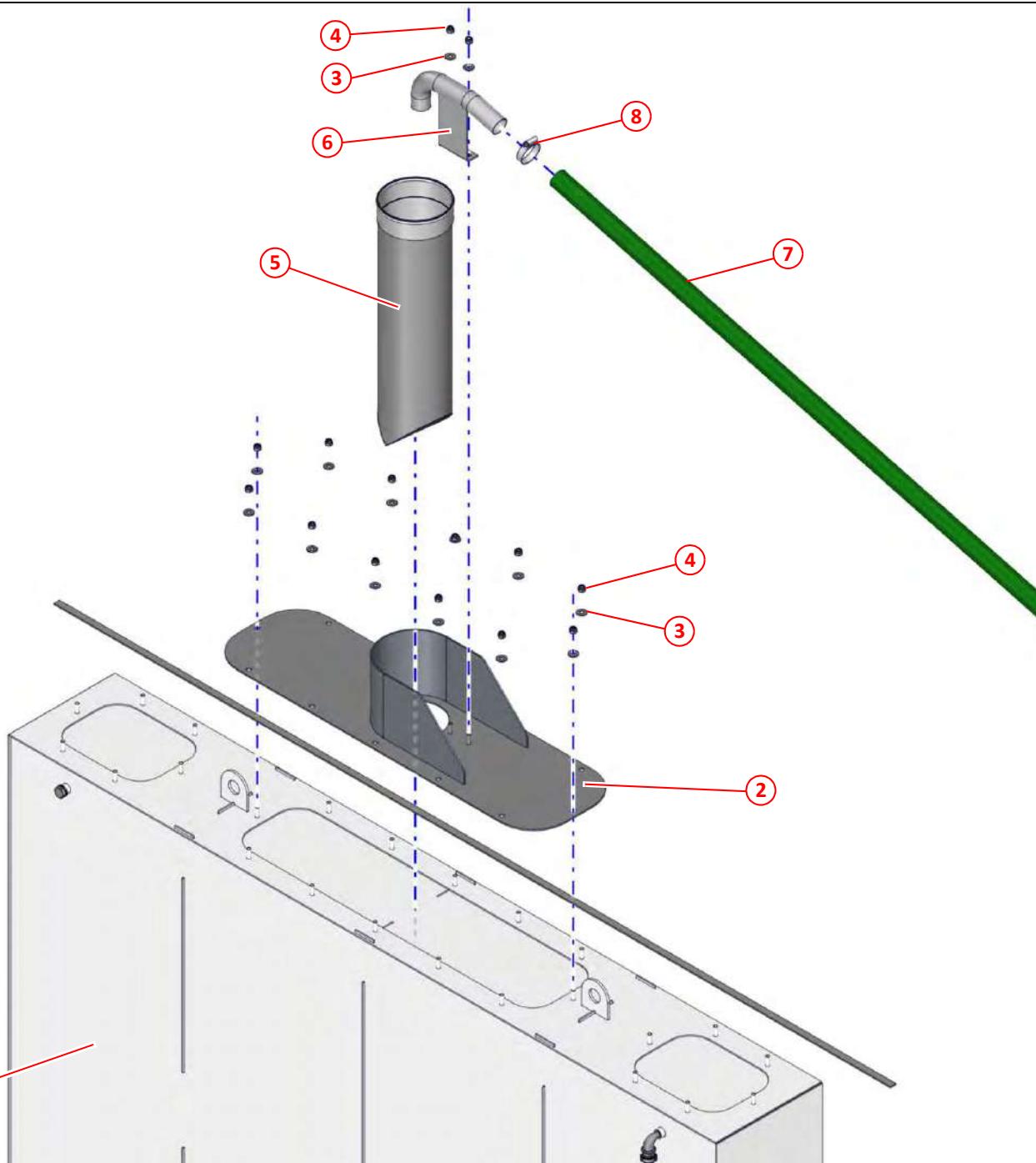
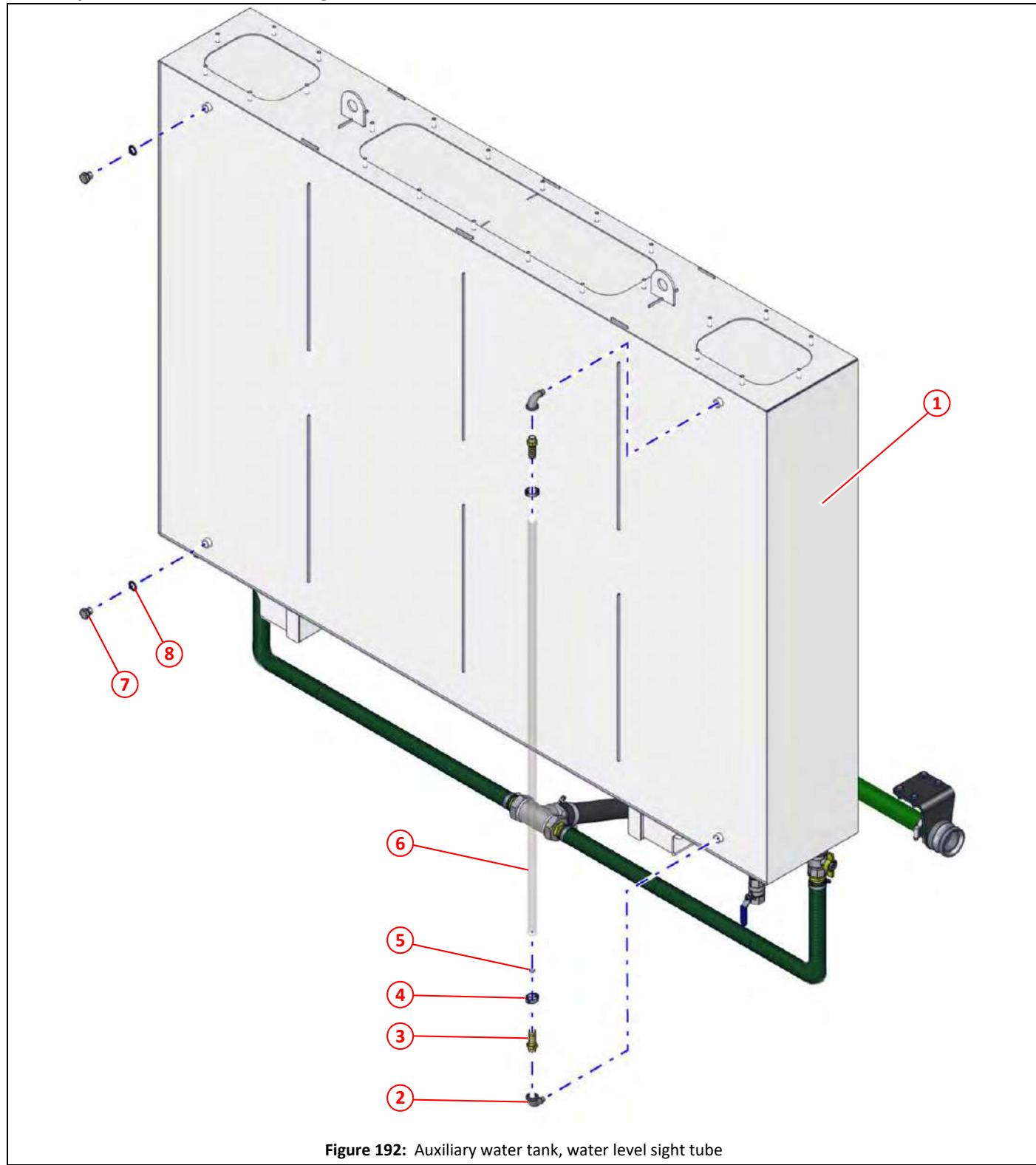


Figure 191: Auxiliary water tank, filler lid

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 043104  | 1   | Auxiliary water tank 650 litre (US 172 gallons), no fittings                  |
| ②    | 045151  | 1   | Auxiliary water tank lid, centre  |
| ③    | 000264  | 14  | Washer M8, stainless steel  |
| ④    | 000263  | 14  | Nyloc nut T M8, stainless steel   |
| ⑤    | 032461  | 1   | Water tank strainer   |
| ⑥    | 024586  | 1   | Hydrant filler pipe   |
| ⑦    | 001045  | 1   | Hose, green medium duty, $\varnothing 1\frac{1}{2}$ ", cut to required length |
| ⑧    | 003007  | 1   | Jubilee clip No. 2A [ $\varnothing 35 - \varnothing 50$ ]                     |
| ⑪    | 020362  | 2   | Inseal strip 3 x 15, cut to 2250, placed under centre lid                     |

## Auxiliary water tank, water level sight tube



| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 043104  | 1   | Auxiliary water tank 650 litre (US 172 gallons), no fittings |
| ②    | 010913  | 2   | Elbow, M/F, $\frac{3}{8}$ " BSP                              |
| ③    | 010930  | 2   | Adapter, $\frac{3}{8}$ " BSP x $\frac{5}{8}$ ", hose tail    |
| ④    | 000202  | 2   | O-Clip $\frac{7}{8}$ "                                       |
| ⑤    | 025335  | 1   | Ball, plastic, $\frac{1}{2}$ "                               |
| ⑥    | 034465  | 1   | PVC tube, clear, $\frac{5}{8}$ ", cut to 1500mm              |
| ⑦    | 011242  | 2   | Plug, $\frac{3}{8}$ " BSP                                    |
| ⑧    | 011153  | 2   | Dowty seal, $\frac{3}{8}$ " BSP                              |

## Auxiliary water tank, valve fittings

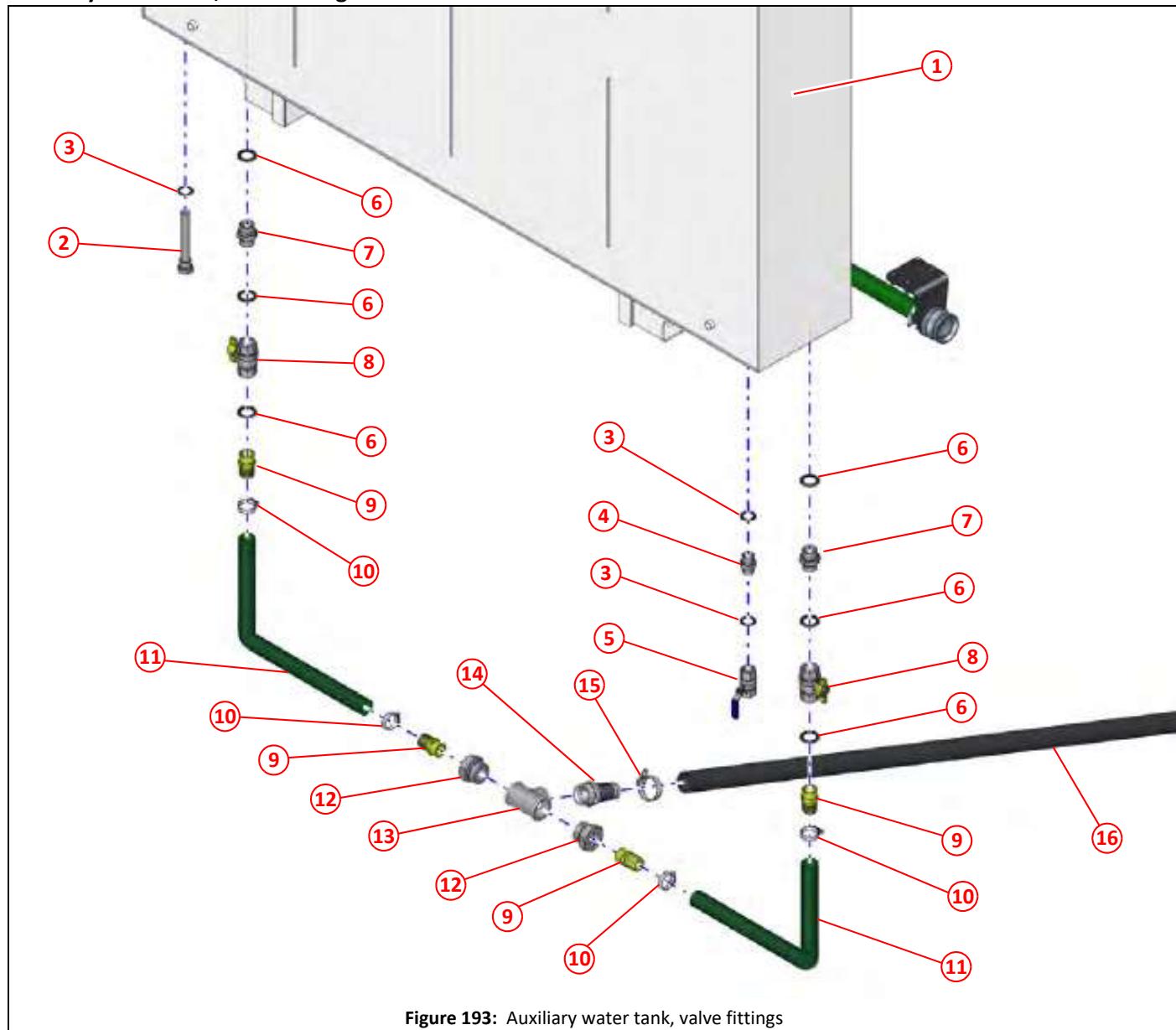


Figure 193: Auxiliary water tank, valve fittings

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 043104  | 1   | Auxiliary water tank 650 litre (US 172 gallons), no fittings                 |
| ②    | 012883  | 1   | Sacrificial anode  |
| ③    | 011155  | 3   | Dowty seal, 3/4" BSP   |
| ④    | 011161  | 1   | Adapter, 3/4" BSP  |
| ⑤    | 013757  | 1   | Valve , ball, 3/4" BSP, to drain tank  |
| ⑥    | 011156  | 6   | Dowty seal, 1" BSP   |
| ⑦    | 011162  | 2   | Adapter, 1" BSP  |
| ⑧    | 002050  | 2   | Valve, ball 1" BSP, (low pressure) BVLP-16                                   |
| ⑨    | 003029  | 4   | Adapter, 1" BSP x 1 1/4" hose tail   |
| ⑩    | 003007  | 6   | Jubilee clip 2A [ø35 - ø50]  |
| ⑪    | 001077  | 2   | Hose, green medium duty ø1 1/4", cut to length required                      |
| ⑫    | 003030  | 2   | Reducer, 1 1/2" x 1"   |
| ⑬    | 003043  | 1   | Tee, 1 1/2" BSP  |
| ⑭    | 002051  | 1   | Adapter, 1 1/2" BSP, male x 1 1/2" hose tail                                 |
| ⑮    | 005081  | 1   | Jubilee clip, high torque, size 50 [ø30 - ø50]                               |
| ⑯    | 045968  | 2   | Hose, SD MEGAFLEX, ø1 1/2" ø38mm, cut to required length, to main water tank |

## Auxiliary water tank, hydrant filler fittings

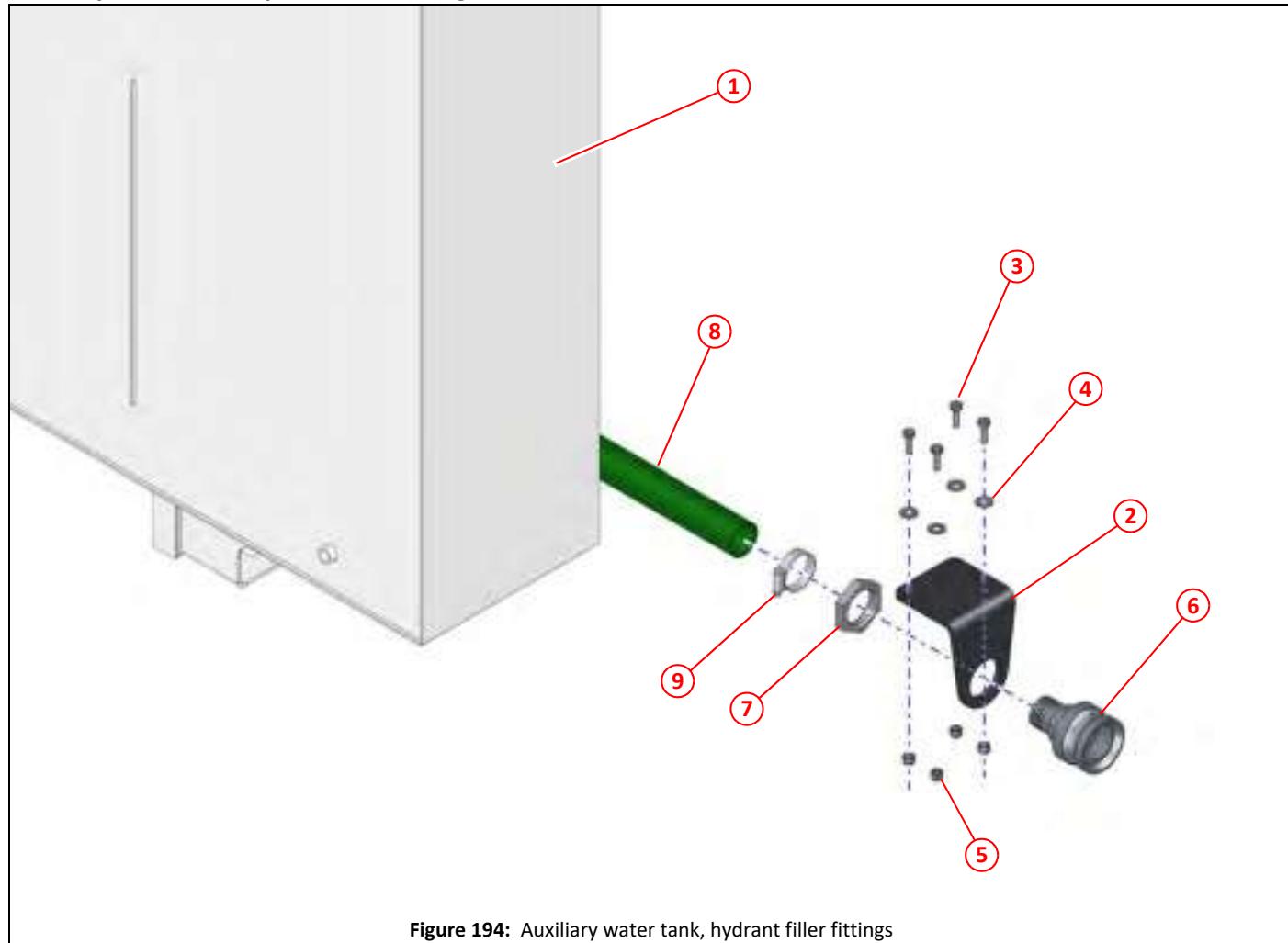


Figure 194: Auxiliary water tank, hydrant filler fittings

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 043104  | 1   | Auxiliary water tank 650 litre (US 172 gallons), no fittings |
| ②    | 039313  | 1   | Adapter bracket, hydrant adapter                             |
| ③    | 000257  | 4   | Setscrew M8 x 25, stainless steel                            |
| ④    | 000264  | 4   | Washer M8, stainless steel                                   |
| ⑤    | 000263  | 4   | Nyloc nut T M8, stainless steel                              |
| ⑥    | 025140  | 1   | Hydrant adapter  |
| ⑦    | 003026  | 1   | Back nut 1½" BSP   |
| ⑧    | 001045  | 1   | Hose, green medium duty, Ø1½", cut to required length        |
| ⑨    | 003007  | 1   | Jubilee clip No. 2A [Ø35 - Ø50]                              |

## Water strainer and fittings

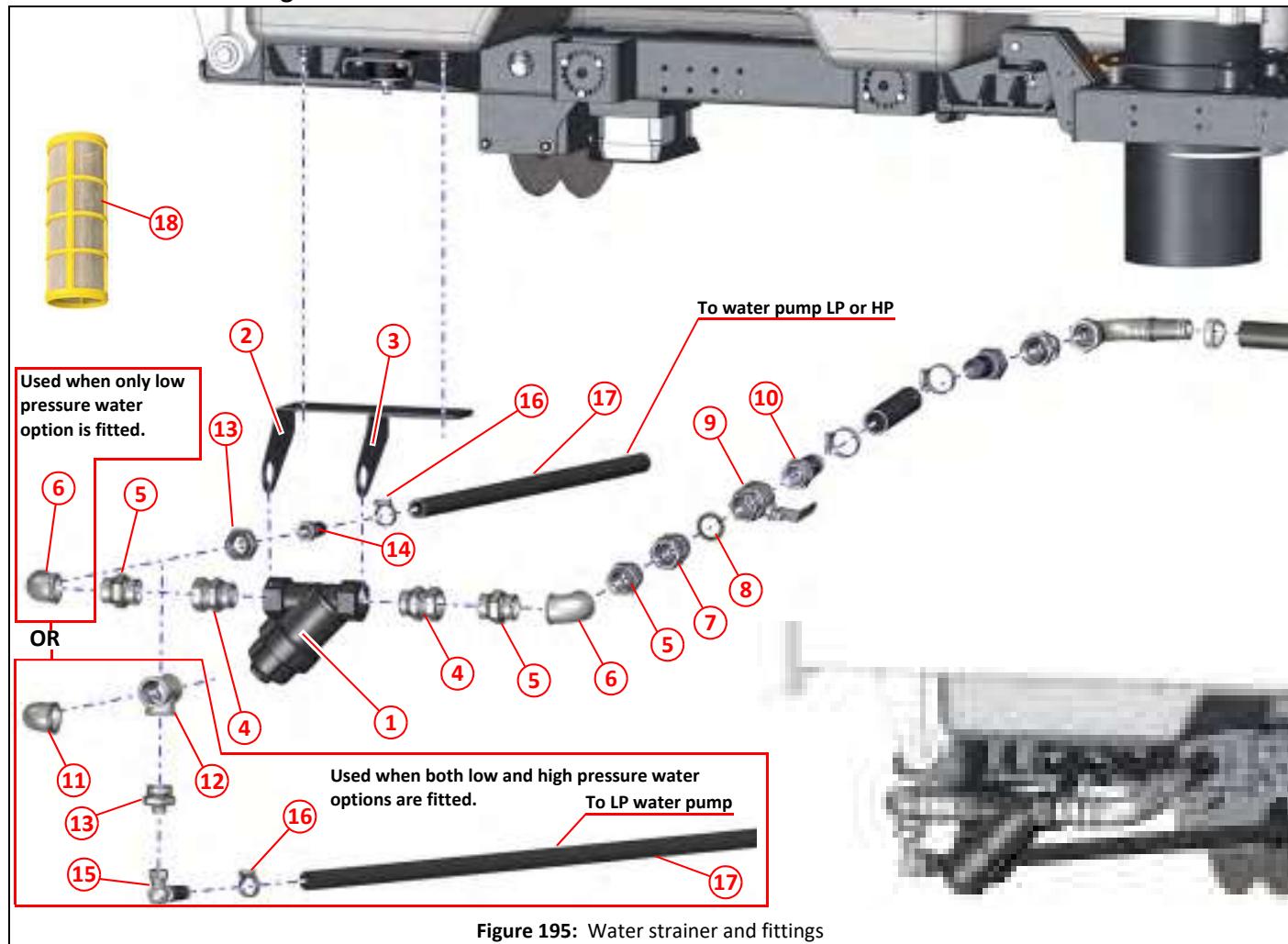


Figure 195: Water strainer and fittings

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 047422  | 1   | Water strainer, 1½" BSP, complete with strainer element |
| ②    | 047426  | 1   | Water filter bracket 1                                  |
| ③    | 047427  | 1   | Water filter bracket 2                                  |
| ④    | 002066  | 2   | Adapter, male/female, 1½" BSP                           |
| ⑤    | 002067  | 3   | Adapter, 1½" BSP  |
| ⑥    | 003044  | 1   | Elbow, female/female, 1½" BSP                           |
| ⑦    | 047438  | 1   | Air purge fitting, male/female, 1½" BSP                 |
| ⑧    | 002072  | 1   | Dowty seal, 1½" BSP                                     |
| ⑨    | 002065  | 1   | Valve, ball, 1½" BSP, low pressure                      |
| ⑩    | 002051  | 1   | Adapter, straight, 1½" BSP x 1½" hose tail              |
| ⑪    | 003015  | 1   | Elbow, male/female, 1½" BSP                             |
| ⑫    | 003043  | 1   | Tee, female/female/female, 1½" BSP                      |
| ⑬    | 002069  | 2   | Adapter, 1½" BSP x ¾" BSP                               |
| ⑭    | 002084  | 1   | Adapter, straight, ¾" BSPF x 1" hose tail               |
| ⑮    | 002203  | 1   | Elbow, ¾" BSPP x 1" hose tail                           |
| ⑯    | 010518  | 2   | Jubilee clip No. 1X [Ø30 - Ø40]                         |
| ⑰    | 010959  | 2   | Hose 1", fuel, cut to required length                   |
| ⑱    | 046423  | 1   | Strainer element for item ①                             |

## Water strainer, water tank attachment fittings

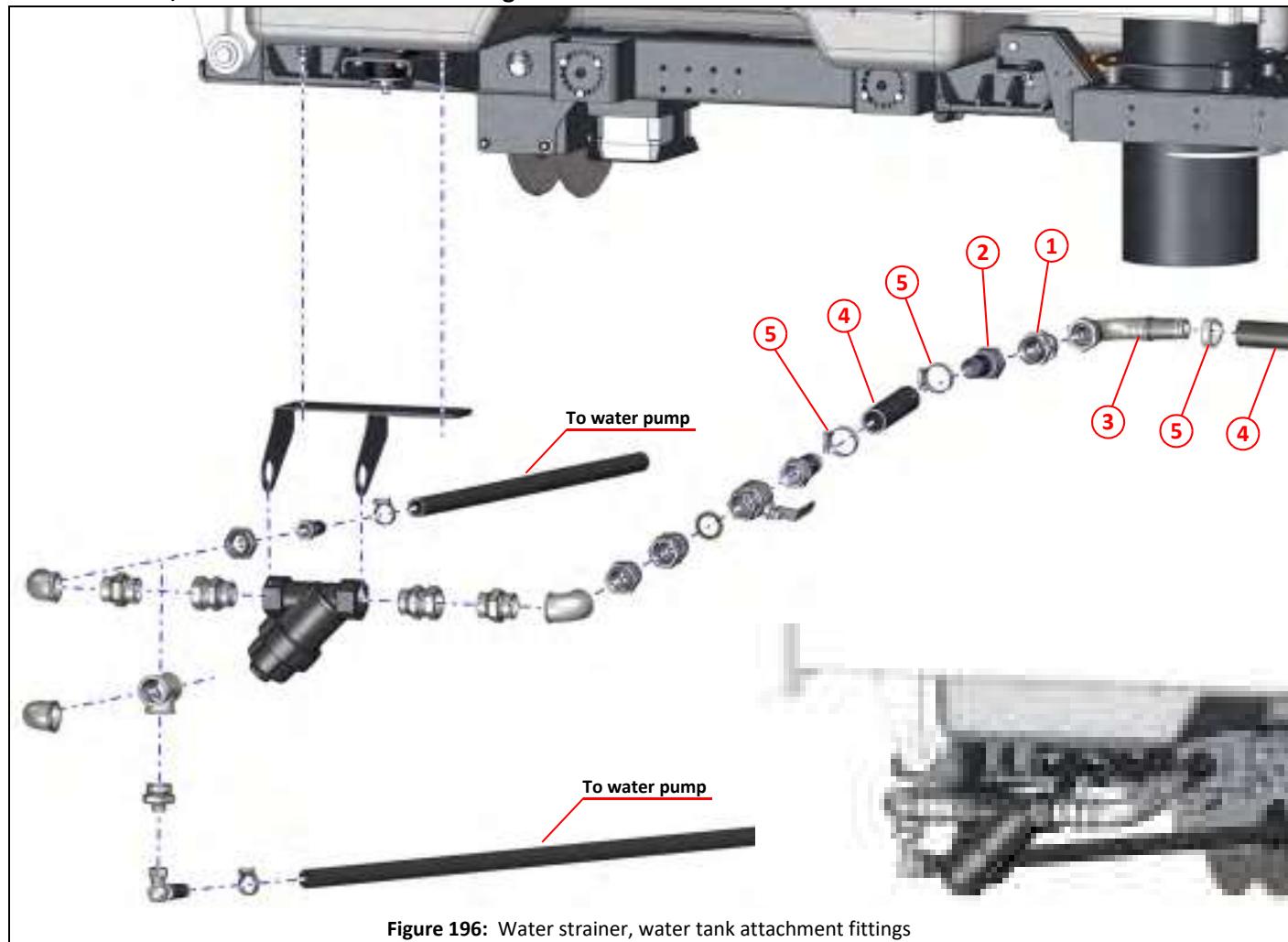
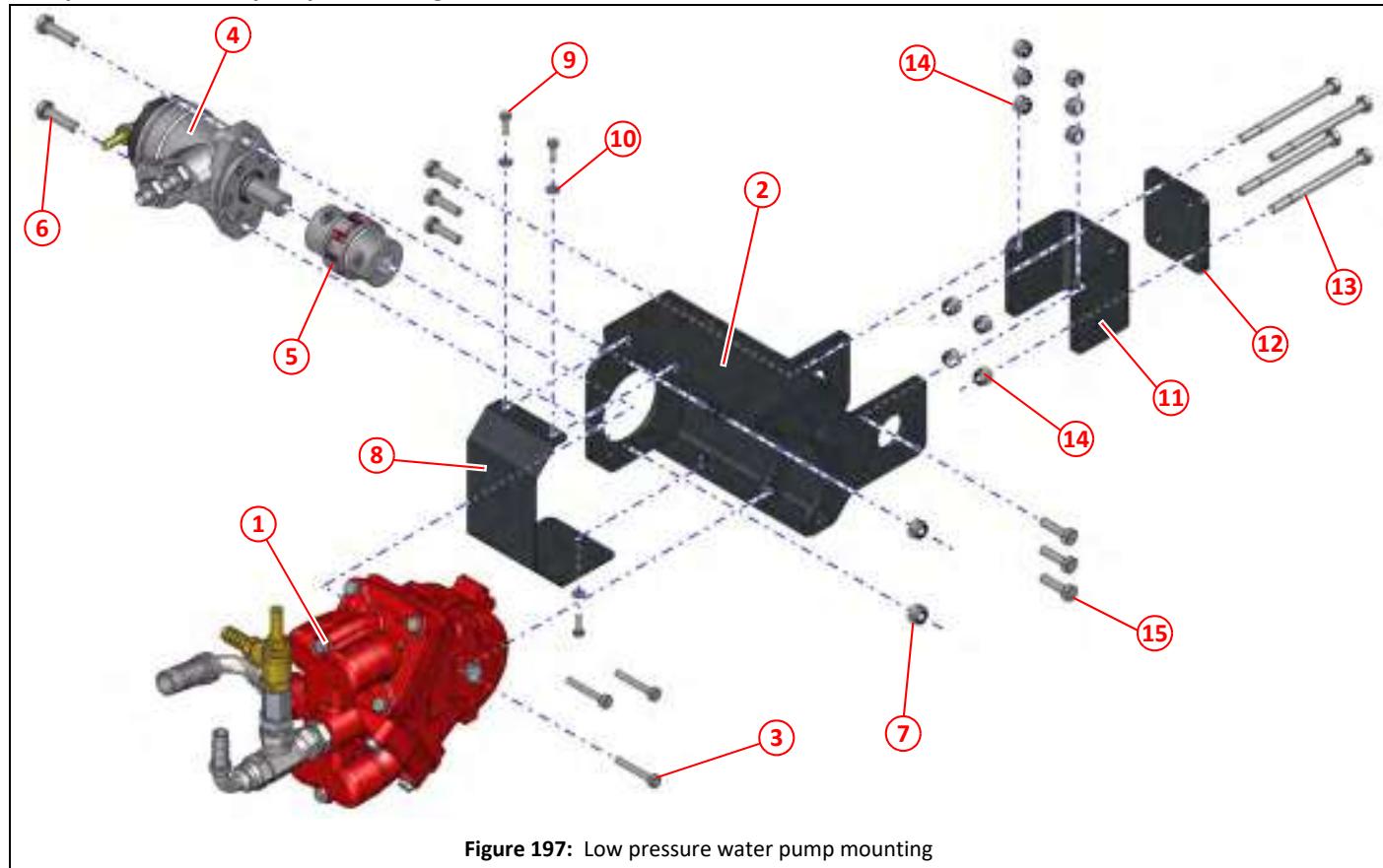


Figure 196: Water strainer, water tank attachment fittings

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 002285  | 1   | Adapter, bulkhead, 1½" BSP, with nut                  |
| ②    | 002288  | 1   | Adapter, straight, 1½" BSP x 1½" hose tail            |
| ③    | 002287  | 1   | Elbow, 90° female 1½" BSP x 1½" hose tail             |
| ④    | 045968  | 2   | Hose, SD MEGAFLEX, ø1½" ø38mm, cut to required length |
| ⑤    | 005081  | 3   | Jubilee clip, high torque, size 50 [ø30 - ø50]        |

**Low pressure water pump mounting**


| Item | Part No | Qty | Description                                |
|------|---------|-----|--|
| ①    | 010208  | 1   | Water pump, twin diaphragm, low pressure   |
| ②    | 045209  | 1   | Mounting bracket, water pump, low pressure |
| ③    | 011016  | 3   | Setscrew HT M8 x 50                        |
| ④    | 043778  | 1   | Hydraulic motor, 40cc                      |
| ⑤    | 043779  | 1   | Coupling, water pump                       |
| ⑥    | 011069  | 2   | Bolt M12 x 40                              |
| ⑦    | 011077  | 2   | Nyloc nut T M12                            |
| ⑧    | 044186  | 1   | Cover, coupling                            |
| ⑨    | 011067  | 3   | Setscrew HT M6 x 20                        |
| ⑩    | 011090  | 3   | Washer M6                                  |
| ⑪    | 045030  | 1   | Adapter plate, water pump mounting         |
| ⑫    | 045031  | 1   | Spreader plate, water pump mounting        |
| ⑬    | 000075  | 4   | Bolt HT M10 x 130                          |
| ⑭    | 011075  | 10  | Nyloc nut T M10                            |
| ⑮    | 011033  | 6   | Setscrew HT M10 x 35                       |

## Low pressure water pump fittings

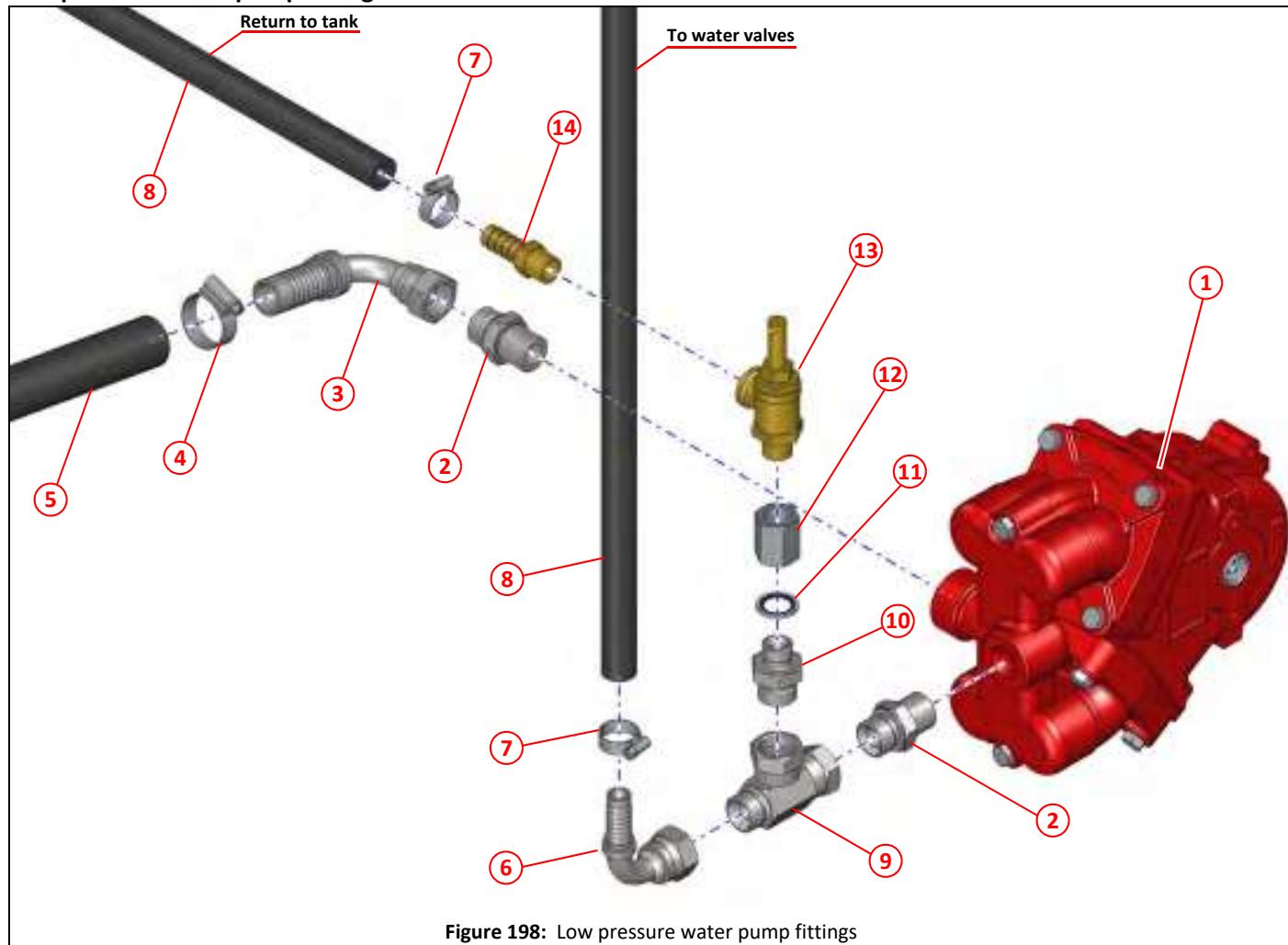


Figure 198: Low pressure water pump fittings

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 010208  | 1   | Water pump, twin diaphragm, low pressure                        |
| ②    | 002245  | 2   | Adapter, $\frac{3}{4}$ " BSPP X $\frac{3}{4}$ " BSP, male/male  |
| ③    | 002079  | 1   | Elbow, $\frac{3}{4}$ " BSP x 1" hose tail                       |
| ④    | 010518  | 1   | Jubilee clip No. 1X [ $\phi$ 30 - $\phi$ 40]                    |
| ⑤    | 010959  | 1   | Hose 1", fuel, cut to required length, feed from water strainer |
| ⑥    | 001145  | 1   | Elbow, 90° $\frac{3}{4}$ " BSP x $\frac{5}{8}$ " hose tail      |
| ⑦    | 010517  | 2   | Jubilee clip, No. OX [ $\phi$ 18 - $\phi$ 25]                   |
| ⑧    | 011000  | 2   | Hose, $\frac{5}{8}$ ", fuel SAE100R6, cut to length required    |
| ⑨    | 002233  | 1   | Tee, $\frac{3}{4}$ " BSP, male/female/female, nut on branch     |
| ⑩    | 011166  | 1   | Adapter, $\frac{3}{4}$ " BSP x $\frac{1}{2}$ " BSP              |
| ⑪    | 011154  | 1   | Dowty seal $\frac{1}{2}$ " BSP                                  |
| ⑫    | 010900  | 1   | Socket $\frac{1}{2}$ " BSP                                      |
| ⑬    | 045532  | 1   | Pressure regulating valve 3300 (13.8 BAR)                       |
| ⑭    | 003042  | 1   | Adapter, $\frac{1}{2}$ " BSPT male x $\frac{5}{8}$ " hose tail  |

## Water pump, twin diaphragm, low pressure, components

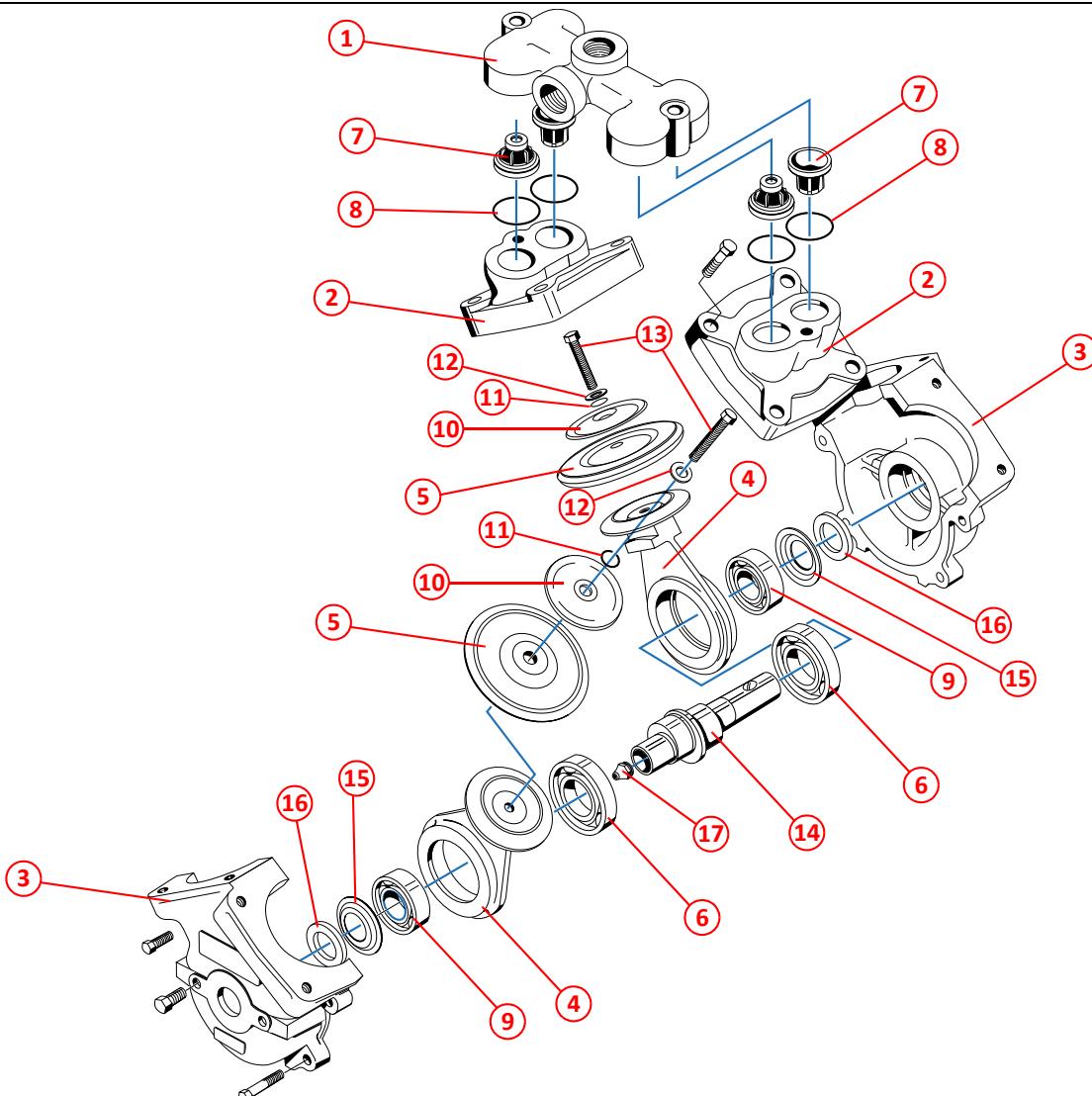


Figure 199: Water pump, twin diaphragm, low pressure, components

| Item | Part No | Qty | Description                                  |
|------|---------|-----|--|
| ①    | 020460  | 1   | Pump bridge, valve chamber                   |
| ②    | 020463  | 2   | Pump head, diaphragm cover                   |
| ③    | 020461  | 2   | Pump crankcase                               |
| ④    | 014682  | 2   | Connecting rod                               |
| ⑤    | 013629  | 2   | Diaphragm                                    |
| ⑥    | TBC     | 2   | Bearing, ball                                |
| ⑦    | 013627  | 4   | Poppet valve                                 |
| ⑧    | 013628  | 4   | Sealing ring                                 |
| ⑨    | TBC     | 2   | Bearing, ball                                |
| ⑩    | 014882  | 2   | Diaphragm upper                              |
| ⑪    | 031560  | 2   | Seal   |
| ⑫    | 031561  | 2   | Washer                                       |
| ⑬    | TBC     | 2   | Bolt   |
| ⑭    | TBC     | 1   | Pump eccentric                               |
| ⑮    | 014881  | 2   | Retainer                                     |
| ⑯    | 014879  | 2   | Felt Washer                                  |
| ⑰    | 010903  | 1   | Grease nipple, straight, $\frac{1}{8}$ " BSP |

## Water valves, low pressure, location

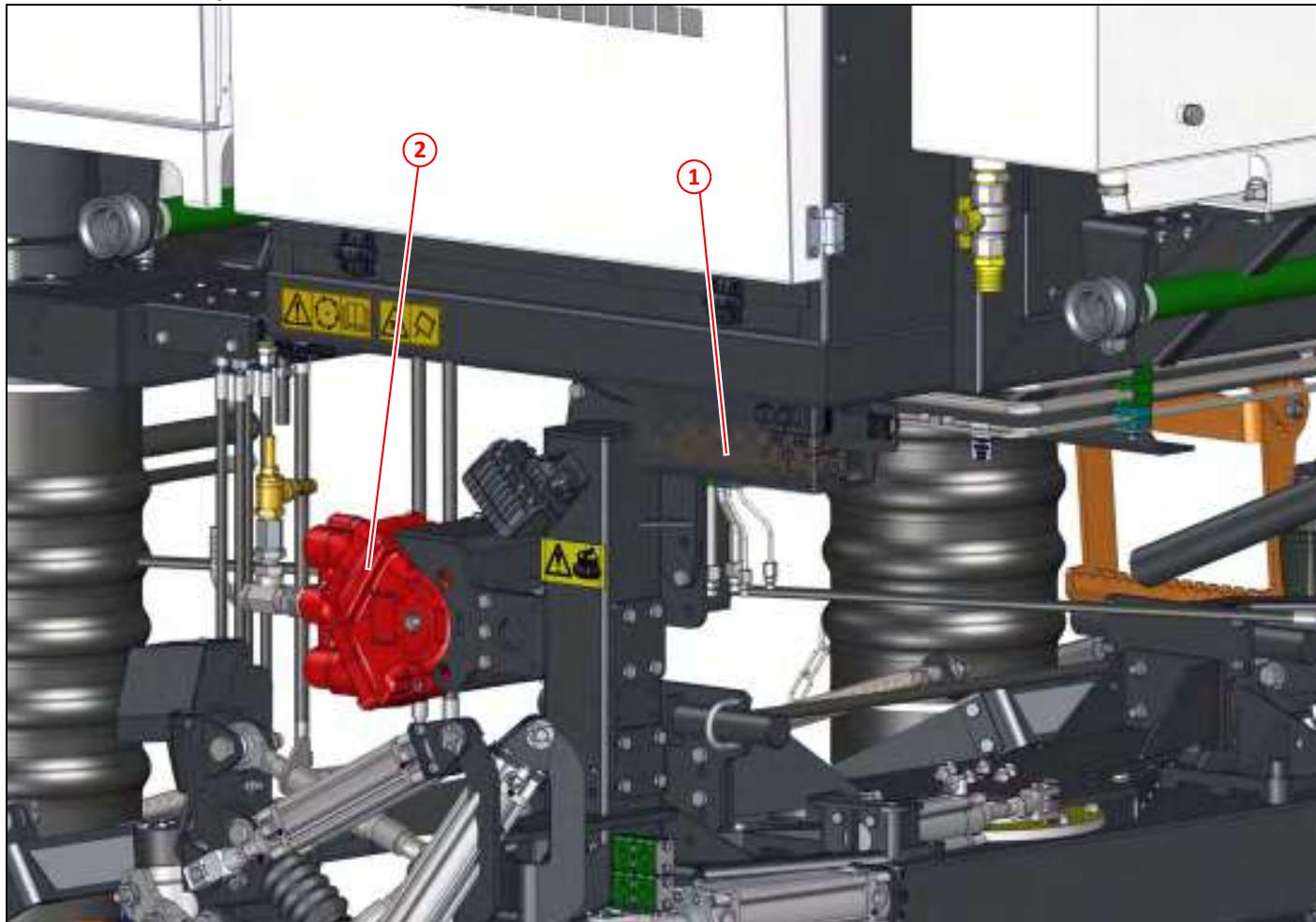


Figure 200: Water valves, low pressure, location

| Item | Part No | Qty | Description                              |     |
|------|---------|-----|--|-----|
| ①    |         |     | Water valves, low pressure               | 235 |
| ②    | 010208  | 1   | Water pump, twin diaphragm, low pressure | 232 |

## Water valves, low pressure, assemblies

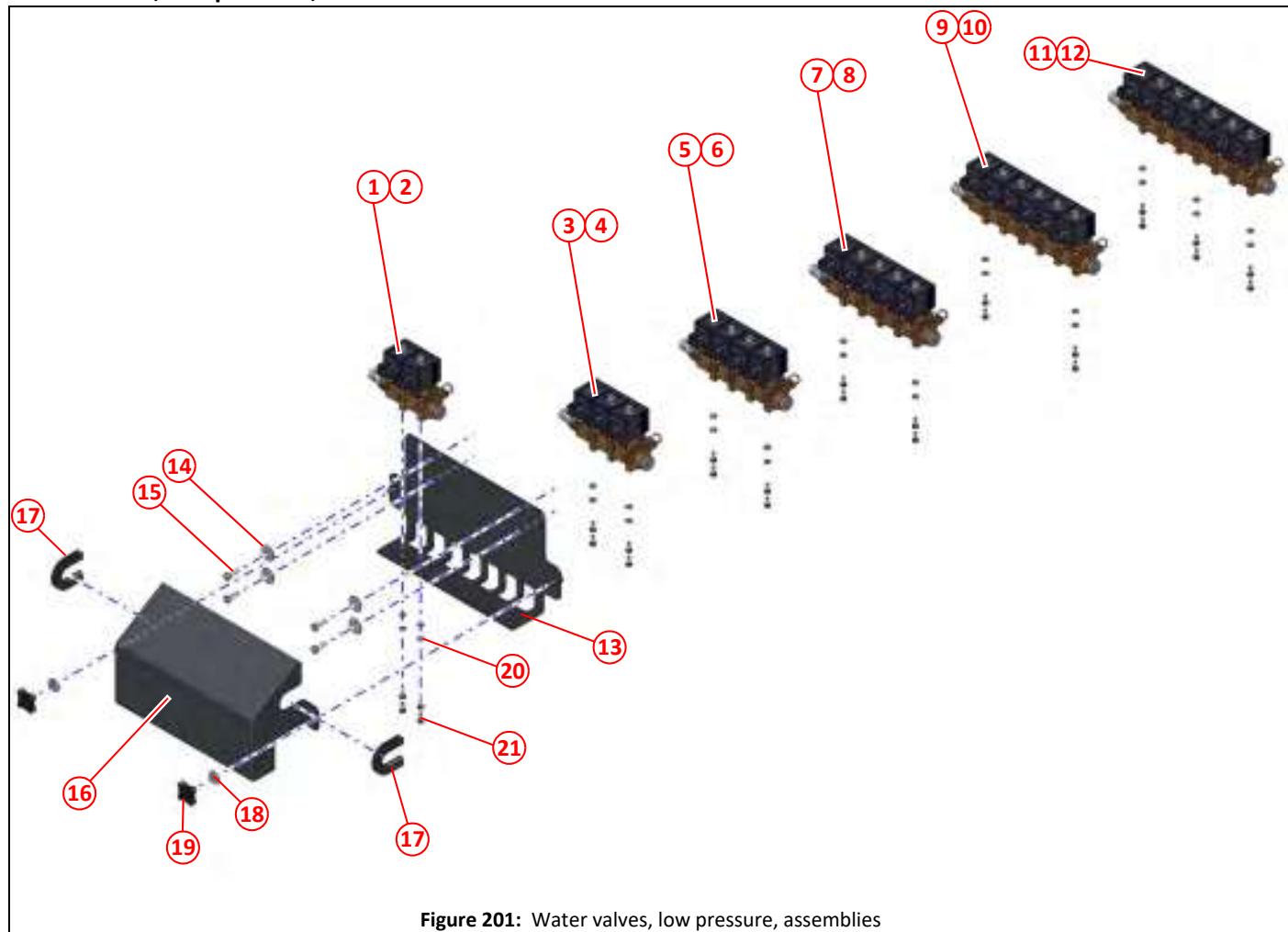


Figure 201: Water valves, low pressure, assemblies

| Item | Part No | Qty    | Description  |
|------|---------|--------|--|
| ①    | 047704  | 1      | 2 valve, water valve assembly - 12V                              |
| ②    | 047692  | 1      | 2 valve, water valve assembly - 24V                              |
| ③    | 047706  | 1      | 3 valve, water valve assembly - 12V                              |
| ④    | 047694  | 1      | 3 valve, water valve assembly - 24V                              |
| ⑤    | 047708  | 1      | 4 valve, water valve assembly - 12V                              |
| ⑥    | 047696  | 1      | 4 valve, water valve assembly - 24V                              |
| ⑦    | 047710  | 1      | 5 valve, water valve assembly - 12V                              |
| ⑧    | 047698  | 1      | 5 valve, water valve assembly - 24V                              |
| ⑨    | 047712  | 1      | 6 valve, water valve assembly - 12V                              |
| ⑩    | 047700  | 1      | 6 valve, water valve assembly - 24V                              |
| ⑪    | 047714  | 1      | 7 valve, water valve assembly - 12V                              |
| ⑫    | 047702  | 1      | 7 valve, water valve assembly - 24V                              |
| ⑬    | 043365  | 1      | Water valve mount, low pressure                                  |
| ⑭    | 011099  | 4      | Repair washer $\varnothing \frac{1}{4}'' \times \varnothing 1''$ |
| ⑮    | 011067  | 4      | Setscrew HT M6 x 20  |
| ⑯    | 043366  | 1      | Water valve cover, low pressure                                  |
| ⑰    | 005073  | 2      | Safety edging, TITANFAST MET106, cut to required length          |
| ⑱    | 011092  | 2      | Washer M8  |
| ⑲    | 000248  | 2      | Grip nut M8  |
| ⑳    | 000410  | 4 or 6 | Washer M5  |
| ㉑    | 000097  | 4 or 6 | Bolt M5 x 12   |

## Water valves, low pressure, components

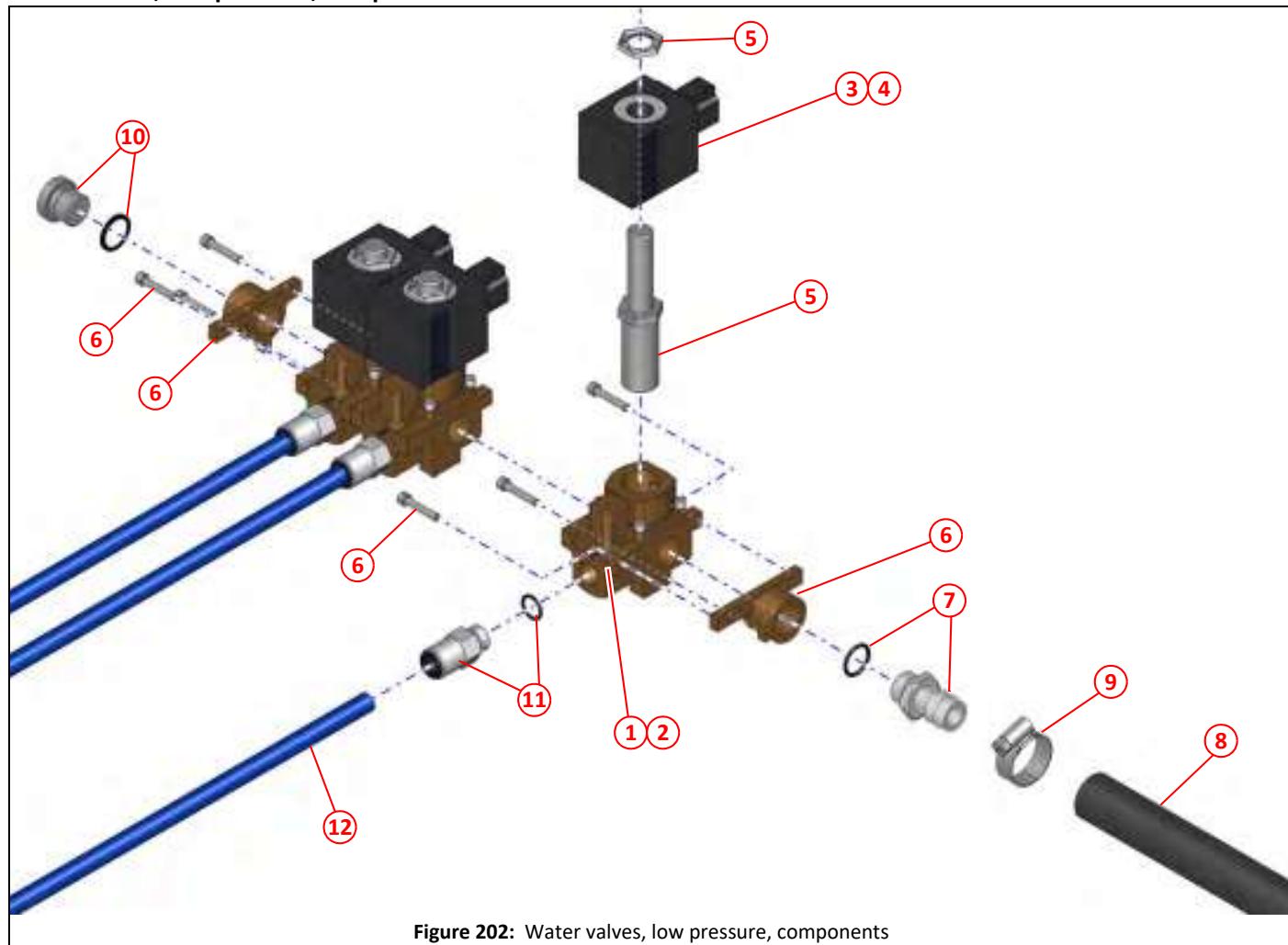


Figure 202: Water valves, low pressure, components

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 038368  | 1   | Water valve, includes items ③ and ⑤, 12V   |
| ②    | 037969  | 1   | Water valve, includes items ④ and ⑤, 24V   |
| ③    | 038371  | 1   | Coil 12V/8W, Deutsch connector, 12V  |
| ④    | 037059  | 1   | Coil 24V/8W, Deutsch connector, 24V  |
| ⑤    | 034625  | 1   | Solenoid valve, includes nut   |
| ⑥    | 045753  | 1   | Service kit, water valve, includes end pieces, screws, O-rings and other parts not shown |
| ⑦    | TBC *   | 1   | Adapter, $\frac{3}{8}$ " BSP x 17mm hose tail, with rubber seal                          |
| ⑧    | 011000  | 1   | Hose, $\frac{5}{8}$ ", fuel SAE100R6, cut to length required, from water pump            |
| ⑨    | 010517  | 1   | Jubilee clip, No. OX [Ø18 - Ø25]   |
| ⑩    | TBC †   | 1   | Plug, $\frac{3}{8}$ " BSP, with rubber seal  |
| ⑪    | 04771   | 1   | Connector, push in, Ø10mm x $\frac{1}{4}$ " BSP male                                     |
| ⑫    | 041031  | 1   | Blue flexible nylon tubing, Ø10mm, cut to length as required                             |

\*. Use 010930 Adapter  $\frac{3}{8}$ " BSP x  $\frac{5}{8}$ " hose tail and 011153 Dowty seal  $\frac{3}{8}$ " BSP as an alternative.

†. Use 011242 Plug  $\frac{3}{8}$ " BSP and 011153 Dowty seal  $\frac{3}{8}$ " BSP as an alternative.

## Water spray nozzle, twin, side brushes

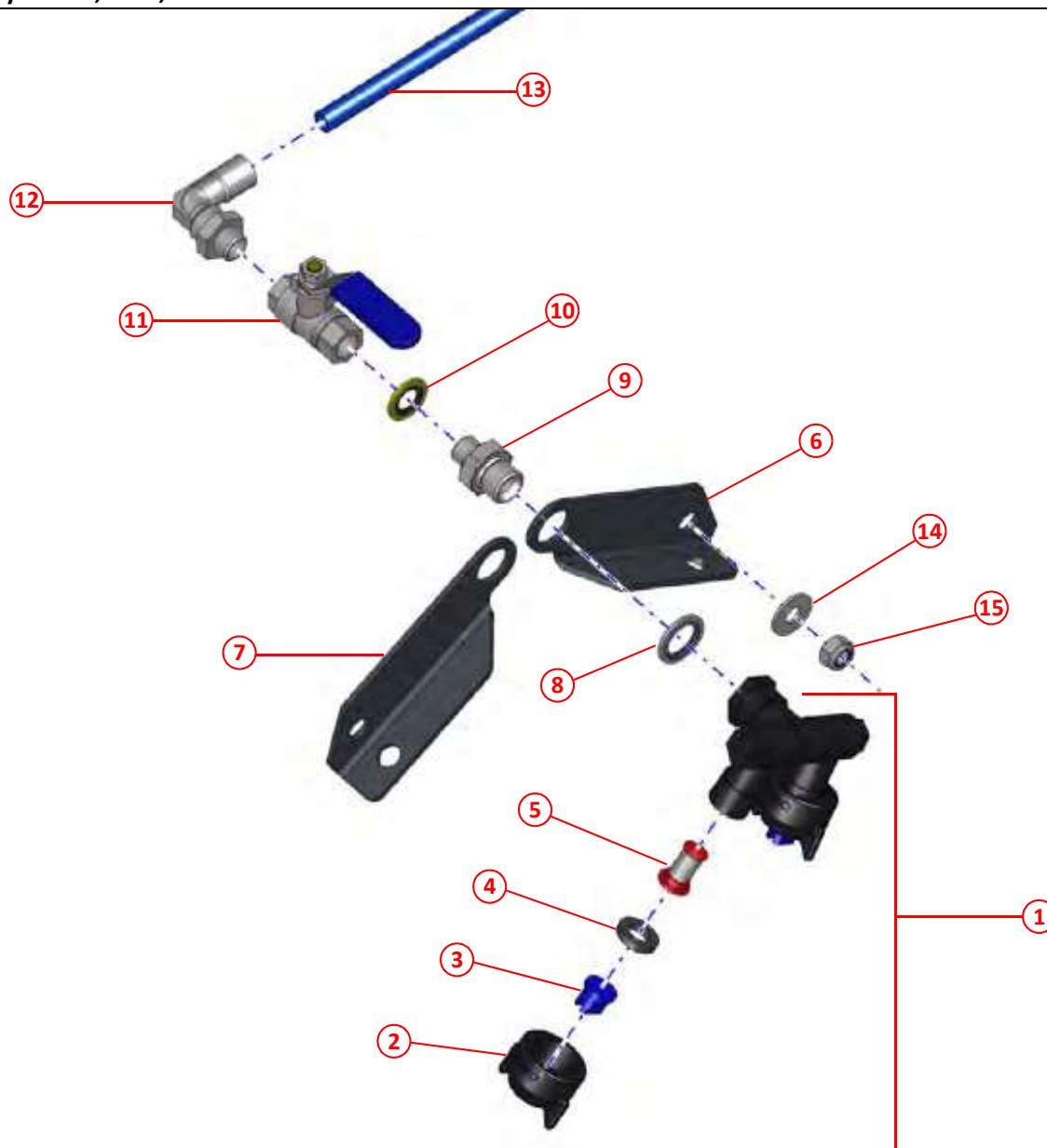


Figure 203: Water spray nozzle, twin, side brushes

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 036044  | 1   | Double swivel nozzle assembly                                |
| ②    | 030746  | 1   | Nozzle cap, cone, per nozzle                                 |
| ③    | 030748  | 1   | Jet, blue, per nozzle  |
| ④    | 030636  | 1   | Rubber washer, per nozzle                                    |
| ⑤    | 030633  | 1   | Filter, 100 mesh, per nozzle                                 |
| ⑥    | 036042  | 1   | Nozzle bracket, for left hand side                           |
| ⑦    | 036043  | 1   | Nozzle bracket, for right hand side                          |
| ⑧    | 011153  | 1   | Dowty seal $\frac{3}{8}$ " BSP                               |
| ⑨    | 011199  | 1   | Adapter, $\frac{3}{8}$ " BSP x $\frac{1}{4}$ " BSP           |
| ⑩    | 011152  | 1   | Dowty seal $\frac{1}{4}$ " BSP                               |
| ⑪    | 011743  | 1   | Valve, ball $\frac{1}{4}$ " BSP                              |
| ⑫    | 047602  | 1   | Elbow, push in, ø10mm x $\frac{1}{4}$ " BSP male             |
| ⑬    | 041031  | 1   | Blue flexible nylon tubing, ø10mm, cut to length as required |
| ⑭    | 011092  | 1   | Washer M8  |
| ⑮    | 011073  | 1   | Nyloc nut T M8   |

## Water spray nozzles, suction nozzle

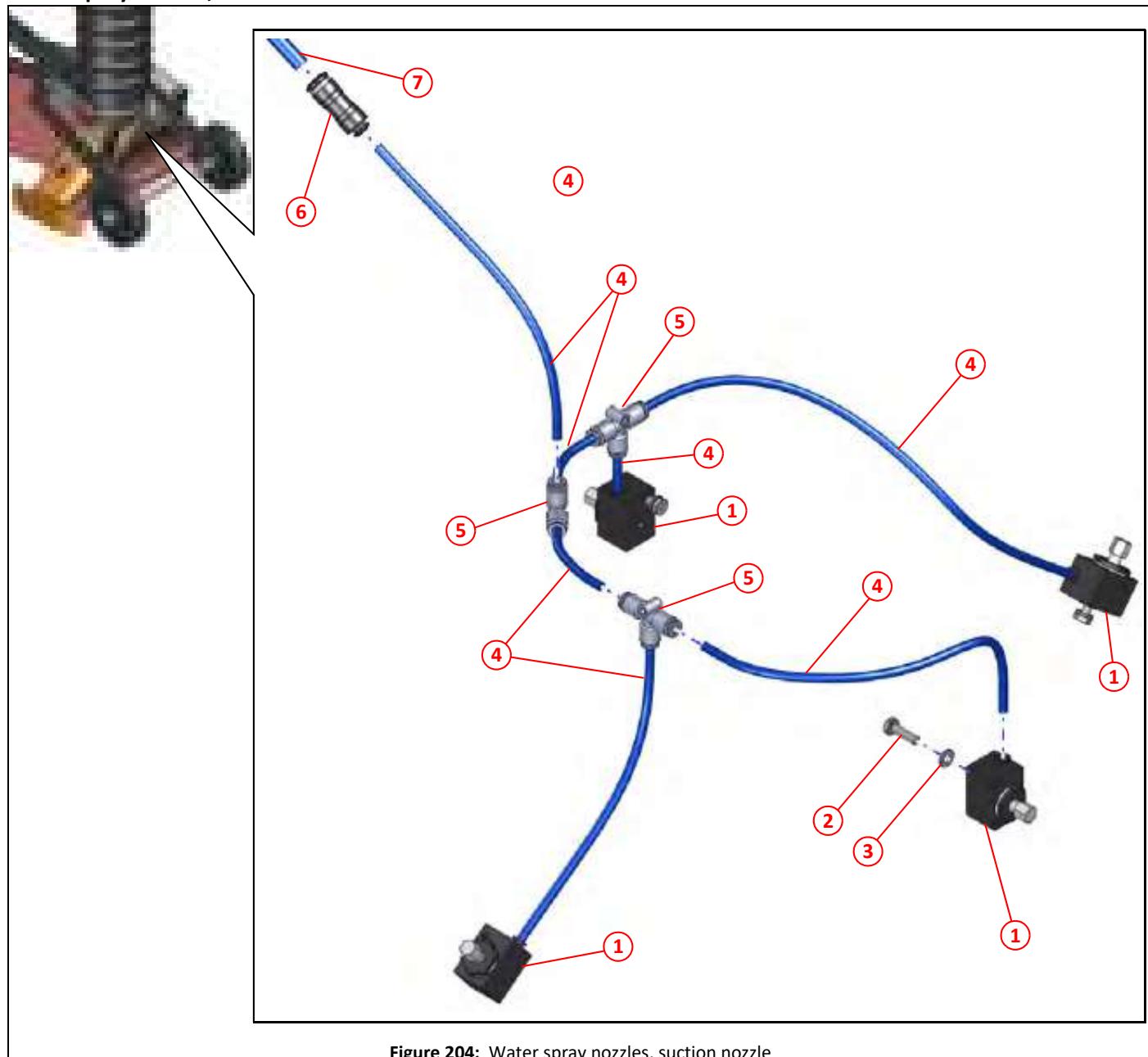


Figure 204: Water spray nozzles, suction nozzle

| Item | Part No  | Qty | Description  |
|------|----------|-----|--|
| ①    | 034342 * | 4   | Spray jet block  |
| ②    | 011067 * | 4   | Setscrew HT M6 x 20  |
| ③    | 011091 * | 4   | Spring washer M6   |
| ④    | 035733 * | 7   | Blue flexible nylon tubing, ø6mm, cut to length as required  |
| ⑤    | 024647 * | 3   | Tee, push in, ø6mm, grey                                     |
| ⑥    | 041029 * | 1   | Adapter, straight, push in, ø10mm to ø6mm                    |
| ⑦    | 041031 * | 1   | Blue flexible nylon tubing, ø10mm, cut to length as required |

\*. Quantities shown are per suction nozzle.

## Water spray nozzles, suction spigot

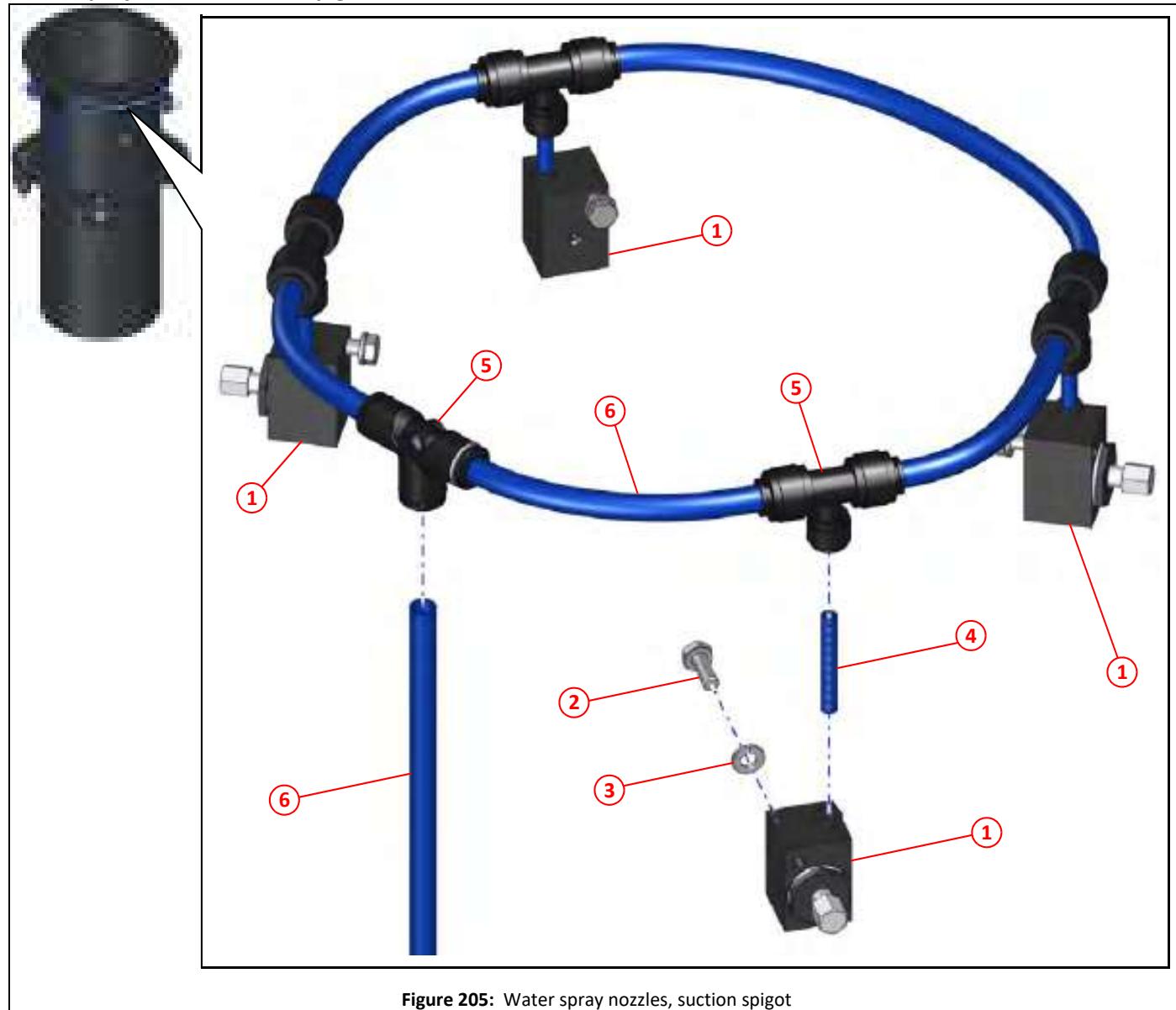


Figure 205: Water spray nozzles, suction spigot

| Item | Part No  | Qty | Description  |  |
|------|----------|-----|--|--|
| ①    | 034342 * | 4   | Spray jet block  |  |
| ②    | 011067 * | 4   | Setscrew HT M6 x 20  |  |
| ③    | 011091 * | 4   | Spring washer M6   |  |
| ④    | 035733 * | 4   | Blue flexible nylon tubing, Ø6mm, cut to length as required  |  |
| ⑤    | 047778 * | 5   | Tee, push in, Ø10 x Ø10 x Ø6, reducer on branch              |  |
| ⑥    | 041031 * | 6   | Blue flexible nylon tubing, Ø10mm, cut to length as required |  |

\*. Quantities shown are per suction spigot.

## Front spray bar, low pressure

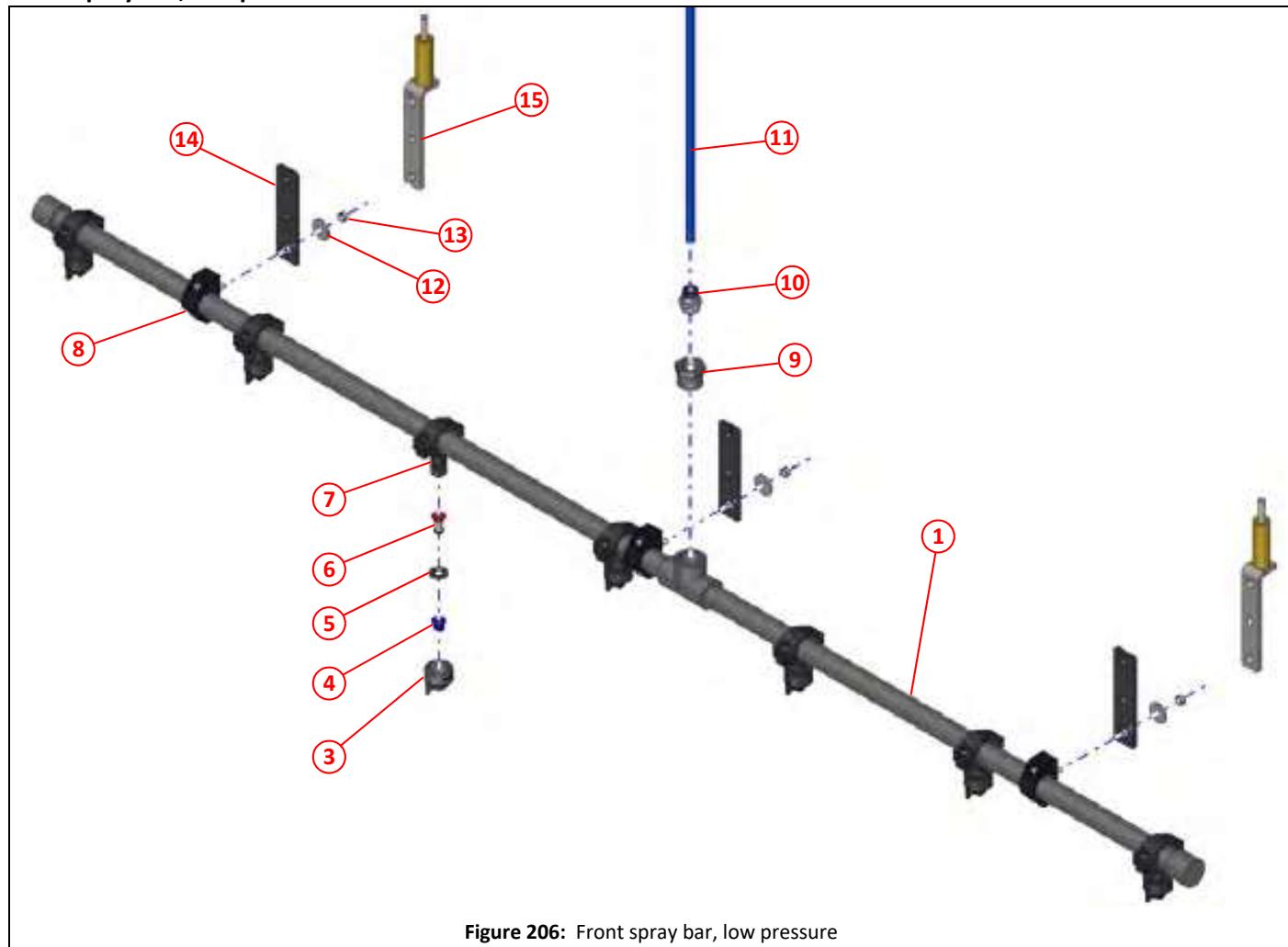


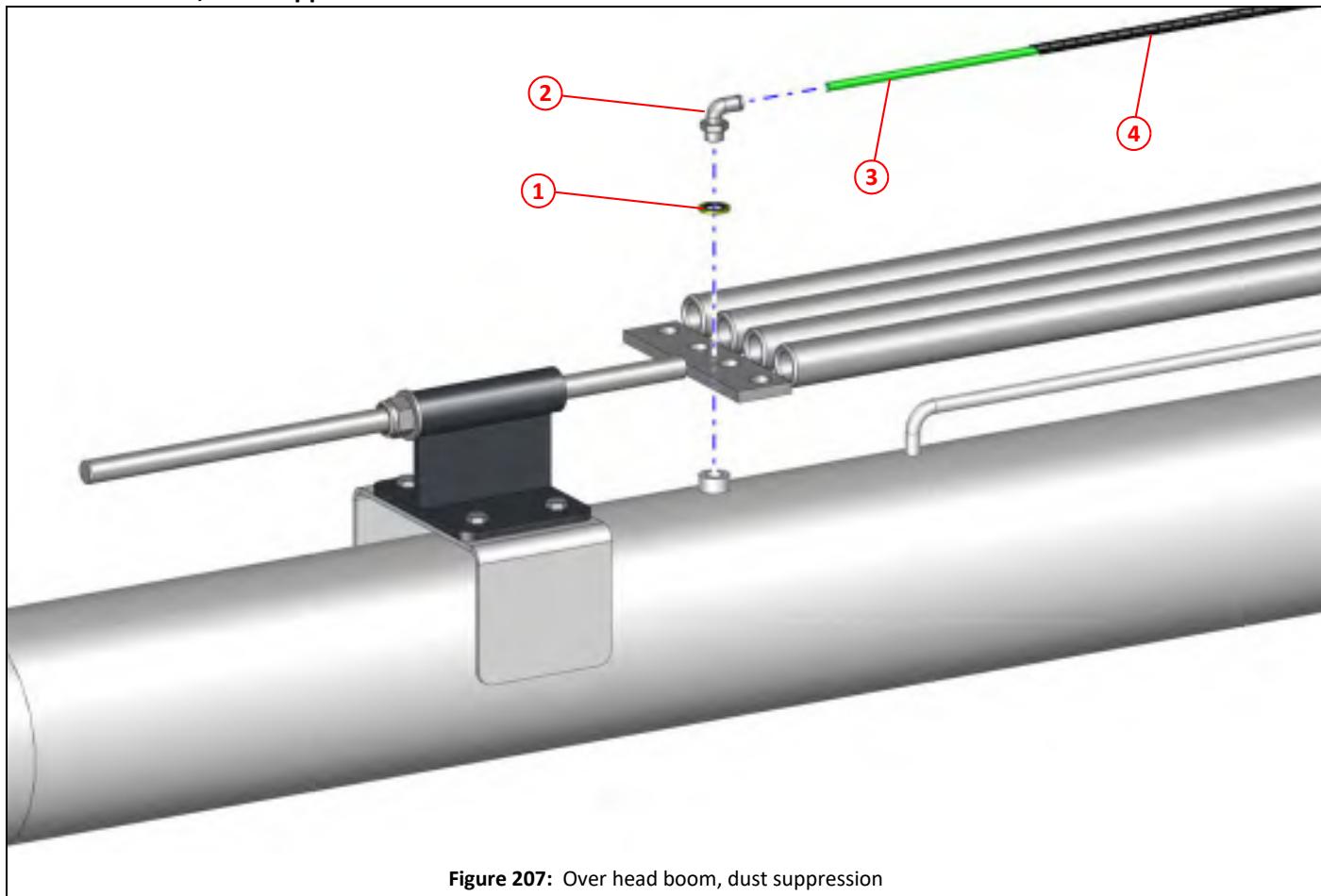
Figure 206: Front spray bar, low pressure

| Item | Part No  | Qty | Description  |
|------|----------|-----|--|
| ①    | 047716   | 1   | Front spray bar, low pressure, includes items ③, ④, ⑤, ⑥, ⑦, and ⑧             |
| ②    | 047718   | 1   | Front spray bar assembly, low pressure, includes items ①, ③, ⑨, and ⑩          |
| ③    | 030635 * | 1   | Nozzle cap, flat fan   |
| ④    | 030748 * | 1   | Jet, blue  |
| ⑤    | 030636 * | 1   | Rubber washer  |
| ⑥    | 030633 * | 1   | Filter, 100 mesh   |
| ⑦    | 030634 * | 1   | Nozzle holder  |
| ⑧    | 031338   | 1   | Clamp  |
| ⑨    | 047717   | 1   | Reducing bush, $\frac{3}{4}''$ to $\frac{1}{2}''$ , plastic                    |
| ⑩    | 041028   | 1   | Adapter, push in, $\frac{1}{2}''$ BSPP to ø10mm                                |
| ⑪    | 041031   | 6   | Blue flexible nylon tubing, ø10mm, cut to length as required, from water valve |
| ⑫    | 011099   | 1   | Repair washer, ø $\frac{1}{4}''$ x ø1"   |
| ⑬    | 011071   | 1   | Nyloc nut T M6   |
| ⑭    | 030392 † | 1   | Bracket, spray bar   |
| ⑮    | 031921 † | 1   | Bracket, spray bar   |

\*. Quantity per nozzle.

†. Examples of spray bar mounting brackets, contact Parts Department with chassis information.

## Over head boom, dust suppression



| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 011152  | 1   | Dowty seal $\frac{1}{4}$ " BSP   |
| ②    | 023203  | 1   | Elbow, swivel, push in, $\phi 6 \times \frac{1}{4}$ " BSP                  |
| ③    | 024650  | 1   | Green flexible nylon tubing, $\phi 6\text{mm}$ , cut to length as required |
| ④    | 004161  | 1   | Flex cable conduit, split, $\phi 15.7$ , cut to length as required         |

## High pressure water pump, mounting

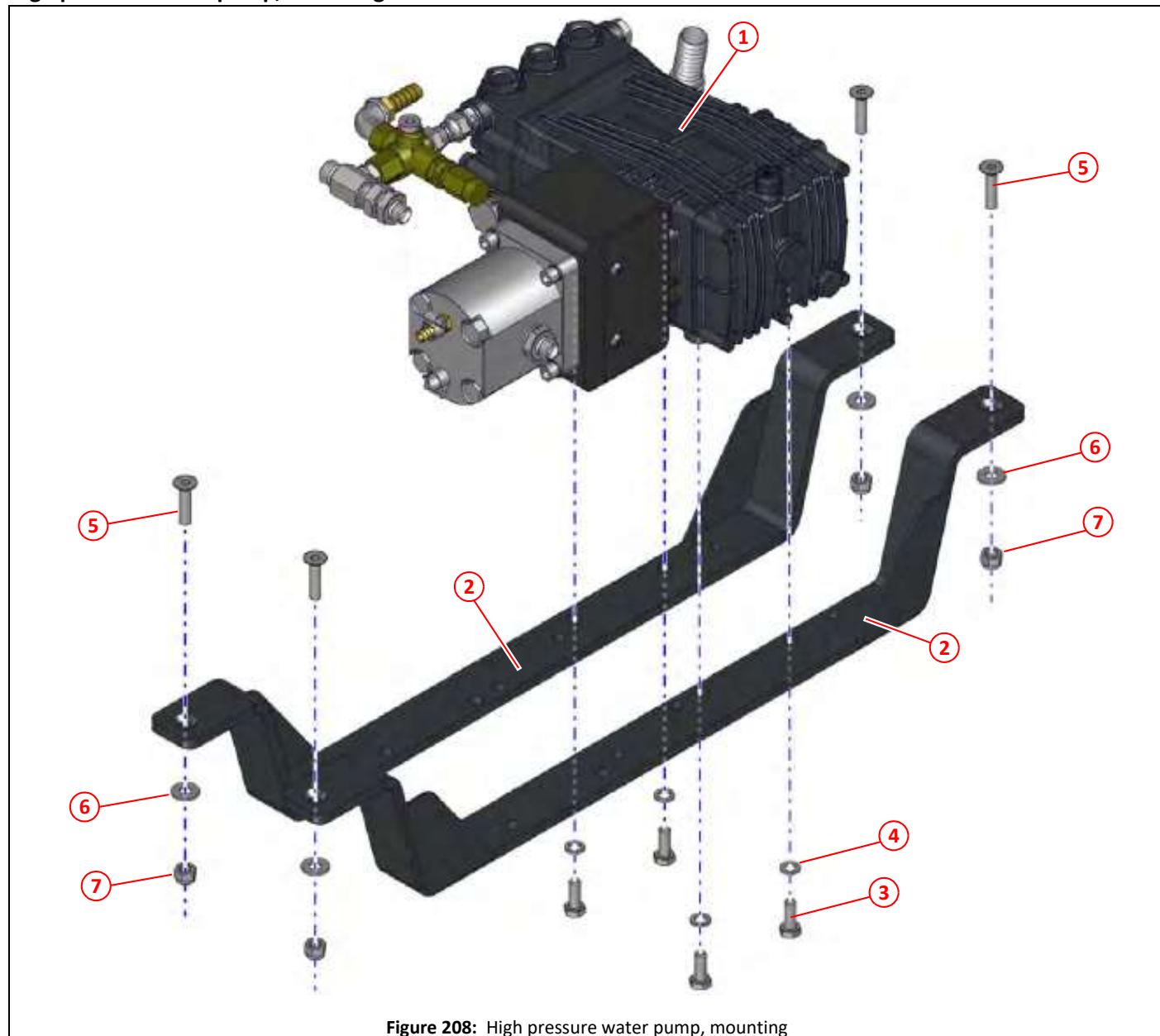


Figure 208: High pressure water pump, mounting

| Item | Part No | Qty | Description                                 |         |
|------|---------|-----|---|---------|
| ①    | 047439  | 1   | Water pump, 30 lpm, high pressure, assembly | 243,244 |
| ②    | 022632  | 2   | Pump support                                |         |
| ③    | 011031  | 4   | Setscrew M10 x 25                           |         |
| ④    | 011095  | 4   | Spring washer M10                           |         |
| ⑤    | 000167  | 4   | Screw, countersunk M10 x 40                 |         |
| ⑥    | 011094  | 4   | Washer M10                                  |         |
| ⑦    | 011075  | 4   | Nyloc nut T M10                             |         |

## High pressure water pump, motor and fittings

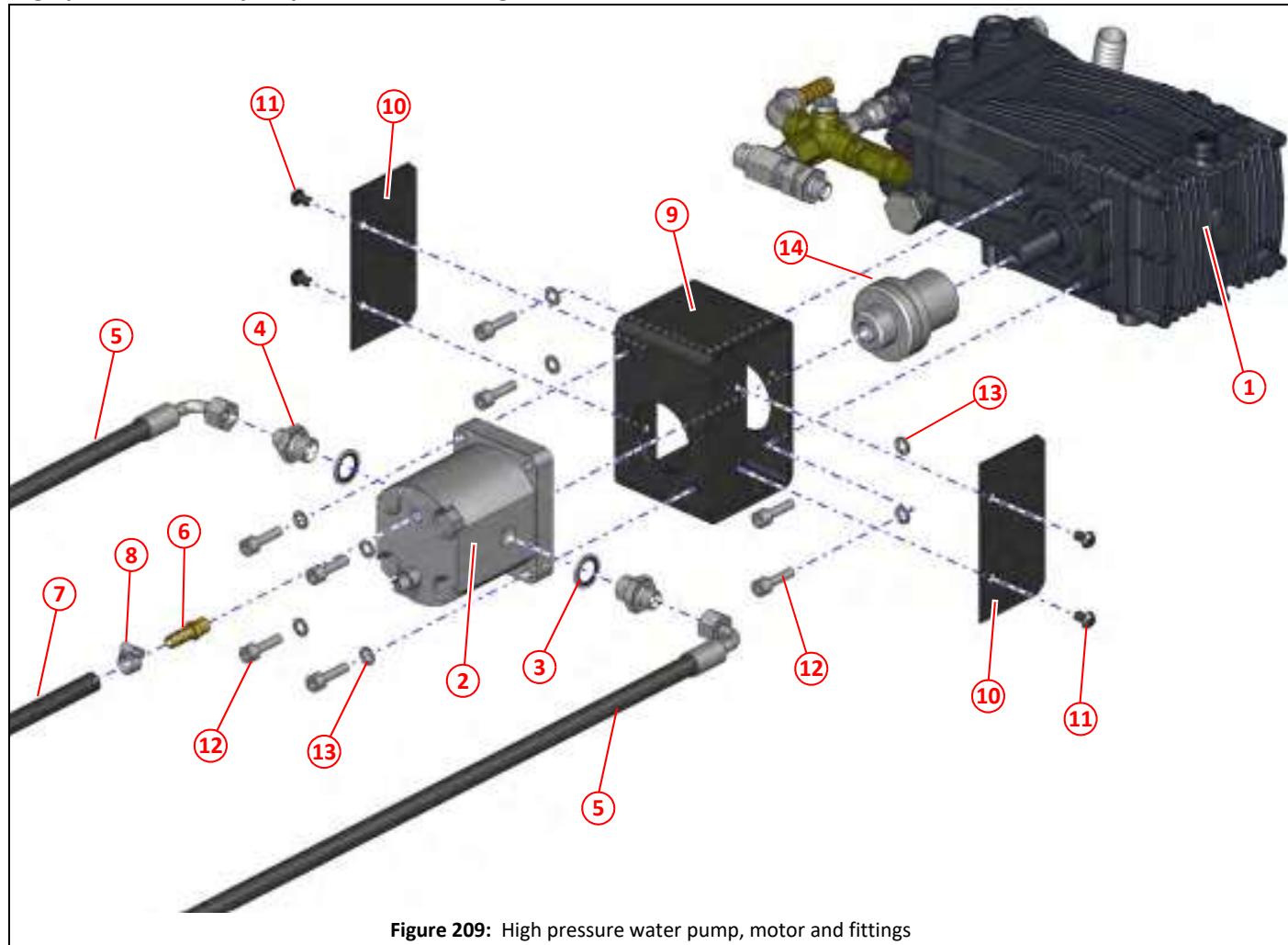


Figure 209: High pressure water pump, motor and fittings

| Item | Part No | Qty | Description  |         |
|------|---------|-----|--|---------|
| ①    | 045366  | 1   | Water pump (30 lpm), high pressure                           | 242,244 |
| ②    | 025373  | 1   | Motor, gear, 16cc, reversible                                | 308     |
| ③    | 011154  | 2   | Dowty seal $\frac{1}{2}$ " BSP                               |         |
| ④    | 011167  | 2   | Adapter, $\frac{1}{2}$ " BSP x $\frac{3}{8}$ " BSP           |         |
| ⑤    | 001149  | 2   | Hose, $\frac{3}{8}$ " x 3550, straight and 90° connectors    |         |
| ⑥    | 003010  | 1   | Hosetail $\frac{1}{4}$ " BSPT x $\frac{3}{8}$ " hose         |         |
| ⑦    | 010958  | 1   | Hose $\frac{3}{8}$ ", cut to required length(s)              |         |
| ⑧    | 003004  | 1   | Jubilee clip, size 00 [ $\varnothing$ 13 - $\varnothing$ 20] |         |
| ⑨    | 036654  | 1   | Drive box kit, 30lpm pump, includes items                    |         |
| ⑩    | TBA     | 2   | Cover, drive box   |         |
| ⑪    | 000405  | 4   | Button head screw M8 x 12                                    |         |
| ⑫    | 000017  | 8   | Socket cap head screw M8 x 12                                |         |
| ⑬    | 011093  | 8   | Spring washer M8   |         |
| ⑭    | TBA     | 1   | Drive coupling   |         |

## High pressure water pump, fittings and hoses

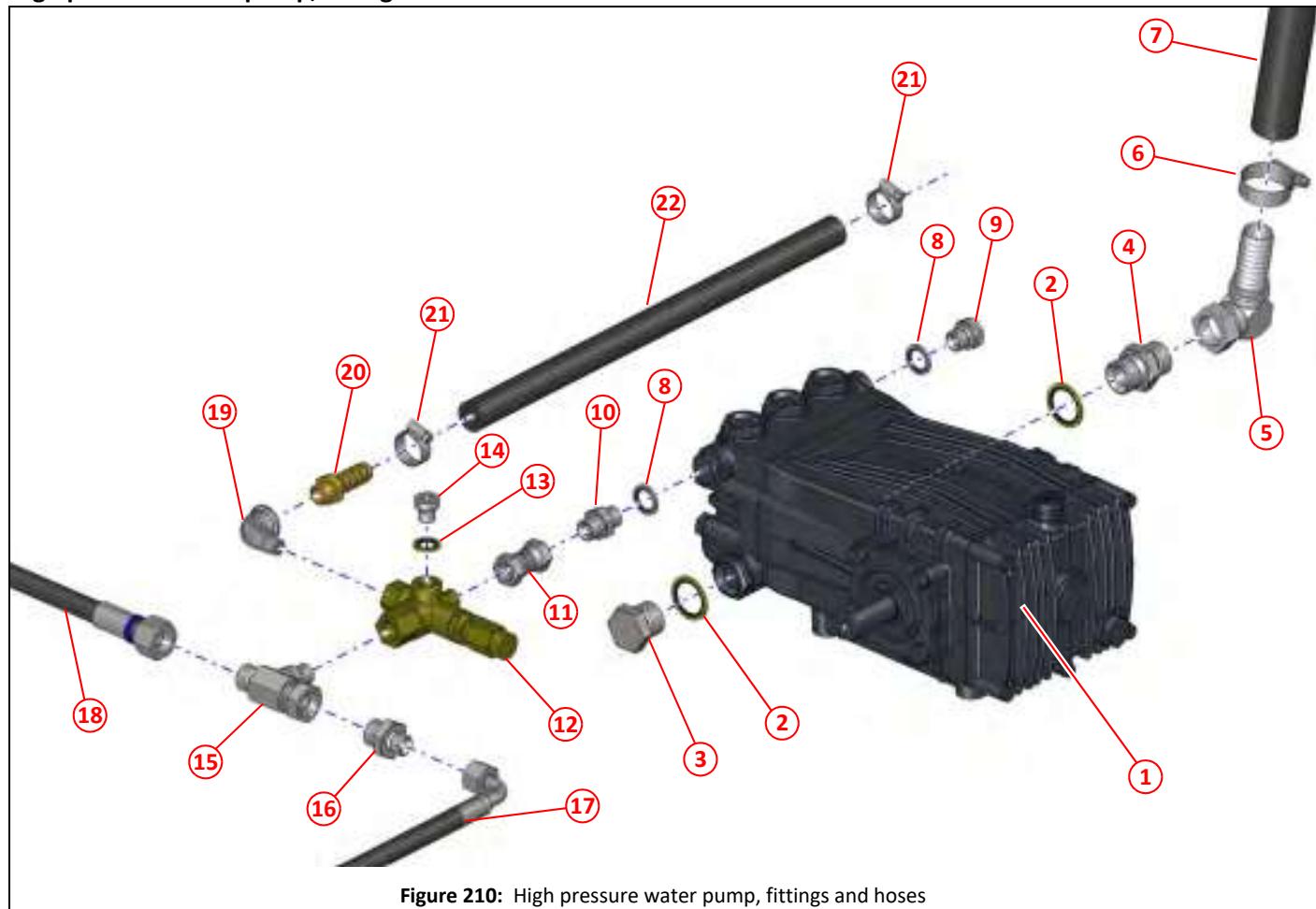


Figure 210: High pressure water pump, fittings and hoses

| Item | Part No | Qty | Description   |         |
|------|---------|-----|---|---------|
| ①    | 045366  | 1   | Water pump (30 lpm), high pressure  | 242,243 |
| ②    | 011155  | 2   | Dowty seal $\frac{3}{4}$ " BSP  |         |
| ③    | 011244  | 1   | Plug, $\frac{3}{4}$ " BSP   |         |
| ④    | 011161  | 1   | Adapter, $\frac{3}{4}$ " BSP  |         |
| ⑤    | 011210  | 1   | Elbow, $\frac{3}{4}$ " BSPF x 1" hose tail  |         |
| ⑥    | 005081  | 1   | Jubilee clip, high torque, size 50 [ $\phi$ 30 - $\phi$ 50]   |         |
| ⑦    | 045968  | 1   | Hose, SD MEGAFLEX, $\phi$ 1 $\frac{1}{2}$ " $\phi$ 38mm, cut to required length, feed from water filter |         |
| ⑧    | 011153  | 2   | Dowty seal $\frac{3}{8}$ " BSP  |         |
| ⑨    | 011242  | 1   | Plug, $\frac{3}{8}$ " BSP   |         |
| ⑩    | 011159  | 1   | Adapter, $\frac{3}{8}$ " BSP  |         |
| ⑪    | 011214  | 1   | Adapter, $\frac{3}{8}$ " BSP, nut/nut   |         |
| ⑫    | 010599  | 1   | Valve, unloader, dual   |         |
| ⑬    | 011152  | 1   | Dowty seal $\frac{1}{4}$ " BSP  |         |
| ⑭    | 002016  | 1   | Plug, hex socket head, $\frac{1}{4}$ " BSP  |         |
| ⑮    | 002110  | 1   | Tee, $\frac{1}{2}$ " BSP male x $\frac{1}{2}$ " BSP female x $\frac{3}{8}$ " BSP male reducer on branch |         |
| ⑯    | 011167  | 1   | Adapter, $\frac{1}{2}$ " BSP x $\frac{3}{8}$ " BSP  |         |
| ⑰    | 001373  | 1   | Hose, $\frac{3}{8}$ " x 900, straight and 90° connectors, feed to hose reel                             |         |
| ⑱    | 001370  | 1   | Hose, $\frac{1}{2}$ " x 2430, straight and 90° connectors, feed to HP water valve manifold              |         |
| ⑲    | 010913  | 1   | Elbow, $\frac{3}{8}$ " BSP, male and female   |         |
| ⑳    | 010930  | 1   | Adapter $\frac{3}{8}$ " BSP x $\frac{5}{8}$ " hose tail   |         |
| ㉑    | 010517  | 1   | Jubilee clip, No OX [ $\phi$ 18 - $\phi$ 25]  |         |
| ㉒    | 011000  | 1   | Hose, $\frac{5}{8}$ ", fuel SAE100R6, cut to length required, return to tank                            |         |

## High pressure water pump 30lpm, seal and repair kits

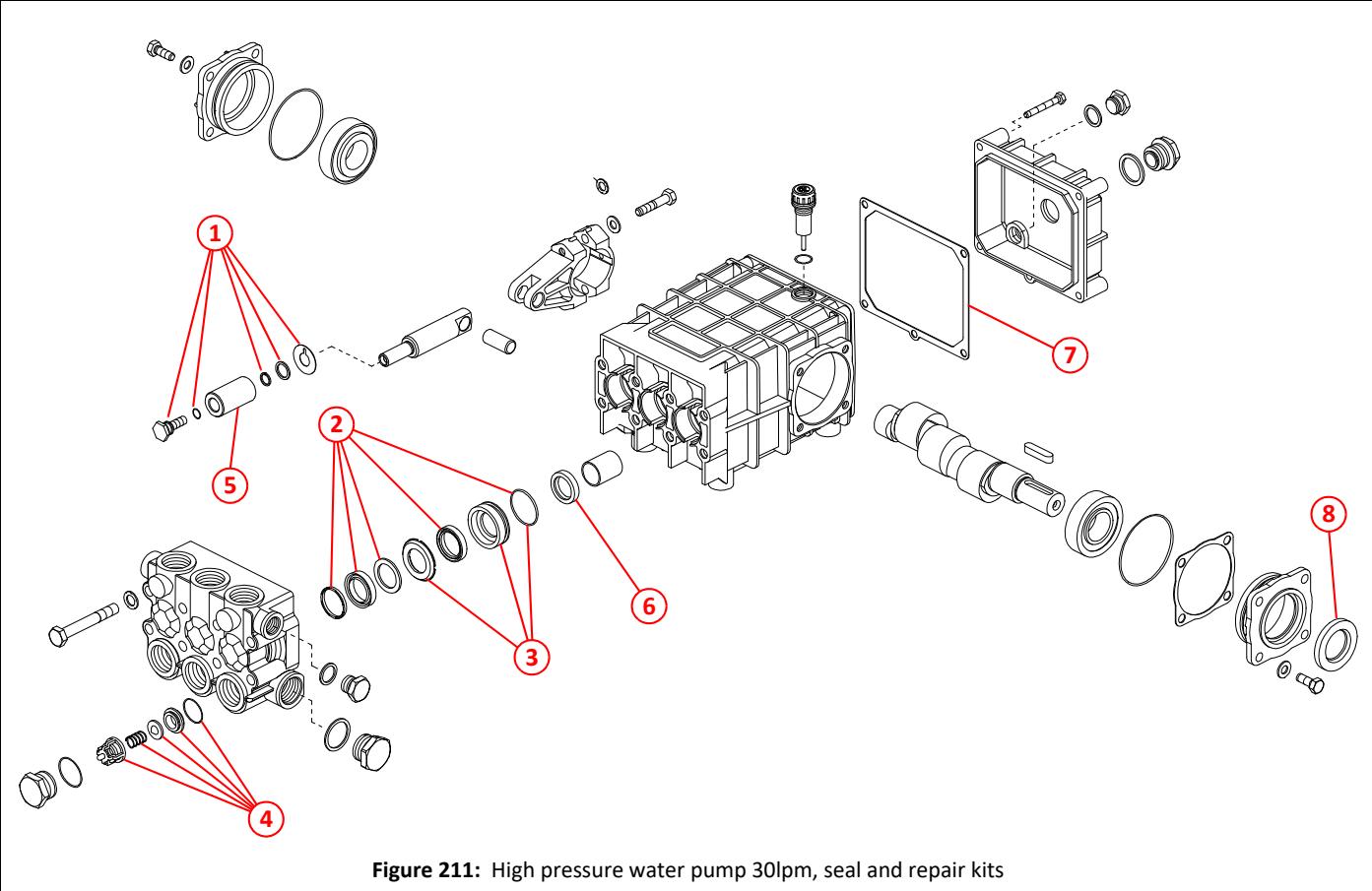
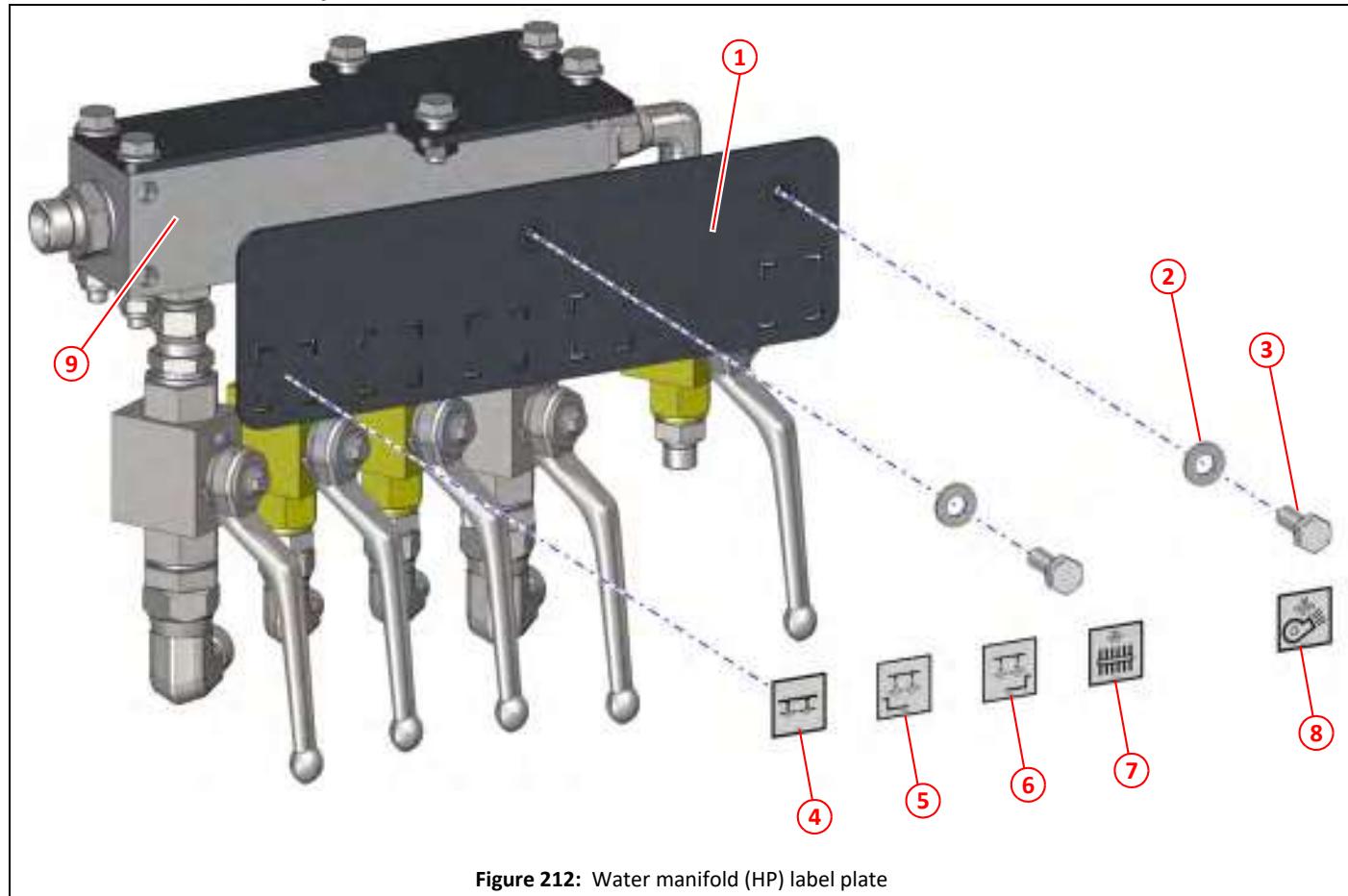


Figure 211: High pressure water pump 30lpm, seal and repair kits

| Item | Part No | Qty | Description                             |
|------|---------|-----|---|
| ①    | 045356  | 1   | Piston bolt repair (Kit 6), PUCP 606106 |
| ②    | 045357  | 1   | Water seal (Kit 11), PUWS 606111        |
| ③    | 045358  | 1   | Brass insert (Kit 18), PUPB             |
| ④    | 045359  | 1   | Valve (kit 3), PUVA 606103              |
| ⑤    | 045360  | 1   | Ceramic piston, PUCP 120533             |
| ⑥    | 045361  | 1   | Piston oil seal, PUOS 000743            |
| ⑦    | 045362  | 1   | Crankcase cover gasket, PUGA 060275     |
| ⑧    | 045363  | 1   | Shaft oil seal, PUOS 000738             |

## Water manifold (HP) label plate



| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 047375  | 1   | Label plate, water manifold                                   |
| ②    | 000419  | 2   | Washer M8, OD Ø17   |
| ③    | 000256  | 2   | Setscrew M8 x 20, stainless steel                             |
| ④    | 039547  | 1   | Label - High pressure front spray bar                         |
| ⑤    | 047788  | 1   | Label - Left hand suction nozzle box high pressure spray bar  |
| ⑥    | 047789  | 1   | Label - Right hand suction nozzle box high pressure spray bar |
| ⑦    | 047790  | 1   | Label - Central brush (wide sweep) high pressure spray bar    |
| ⑧    | 047791  | 1   | Label - Fan wash  |
| ⑨    | 047247  | 1   | Manifold, 2 x 1/2" BSP ports and 4 x 3/8" BSP ports           |

## Water manifold (HP) mounting bracket

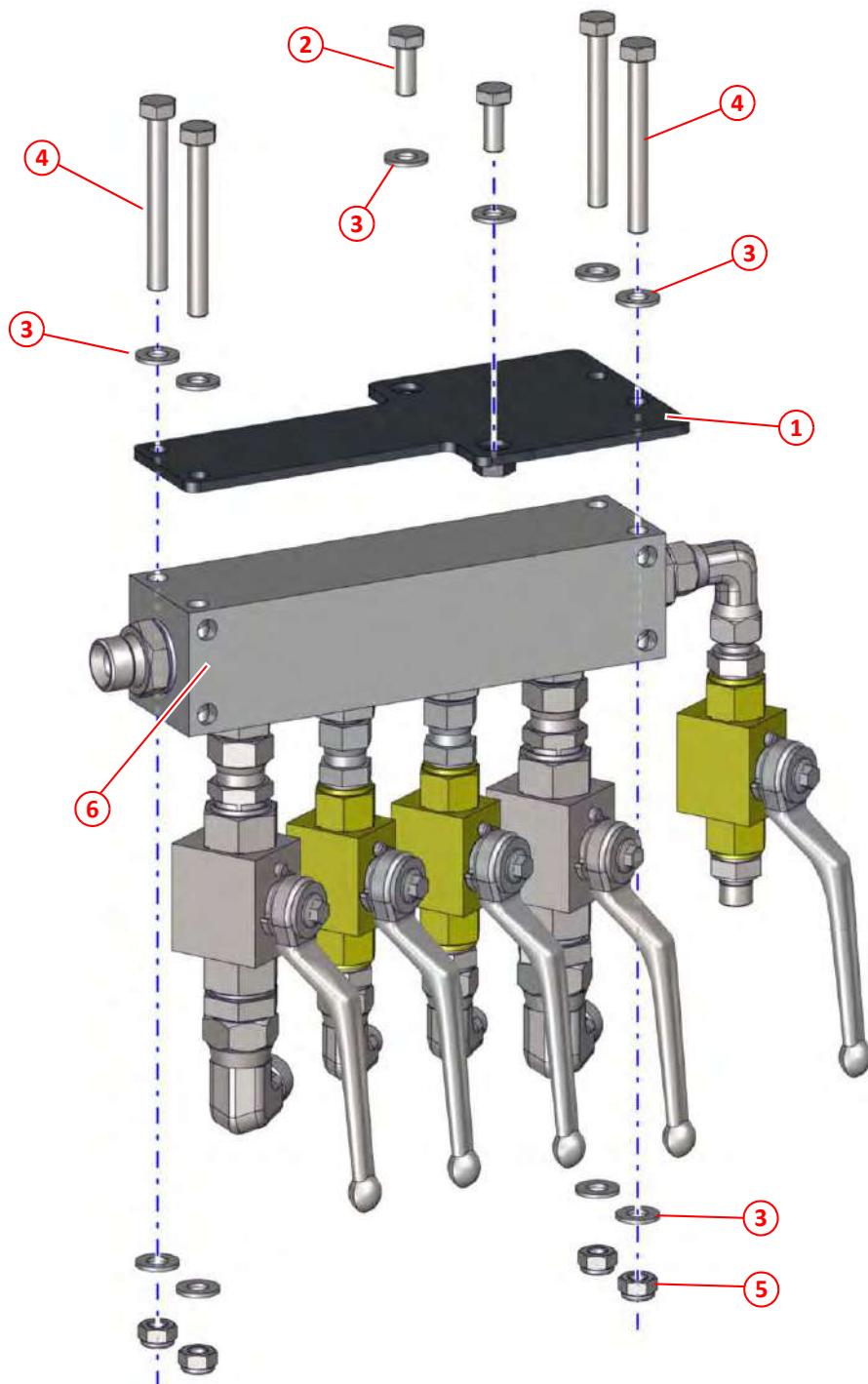


Figure 213: Water manifold (HP) mounting bracket

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 047248  | 1   | Mount, water manifold   |
| ②    | 011010  | 2   | Setscrew M8 x 20  |
| ③    | 000419  | 10  | Washer M8, OD Ø17   |
| ④    | 011018  | 4   | Bolt M8 x 70  |
| ⑤    | 011073  | 4   | Nyloc nut T M8  |
| ⑥    | 047247  | 1   | Manifold, 2 x $\frac{1}{2}$ " BSP ports and 4 x $\frac{3}{8}$ " BSP ports |

## Water manifold (HP) fittings, valves, and hoses

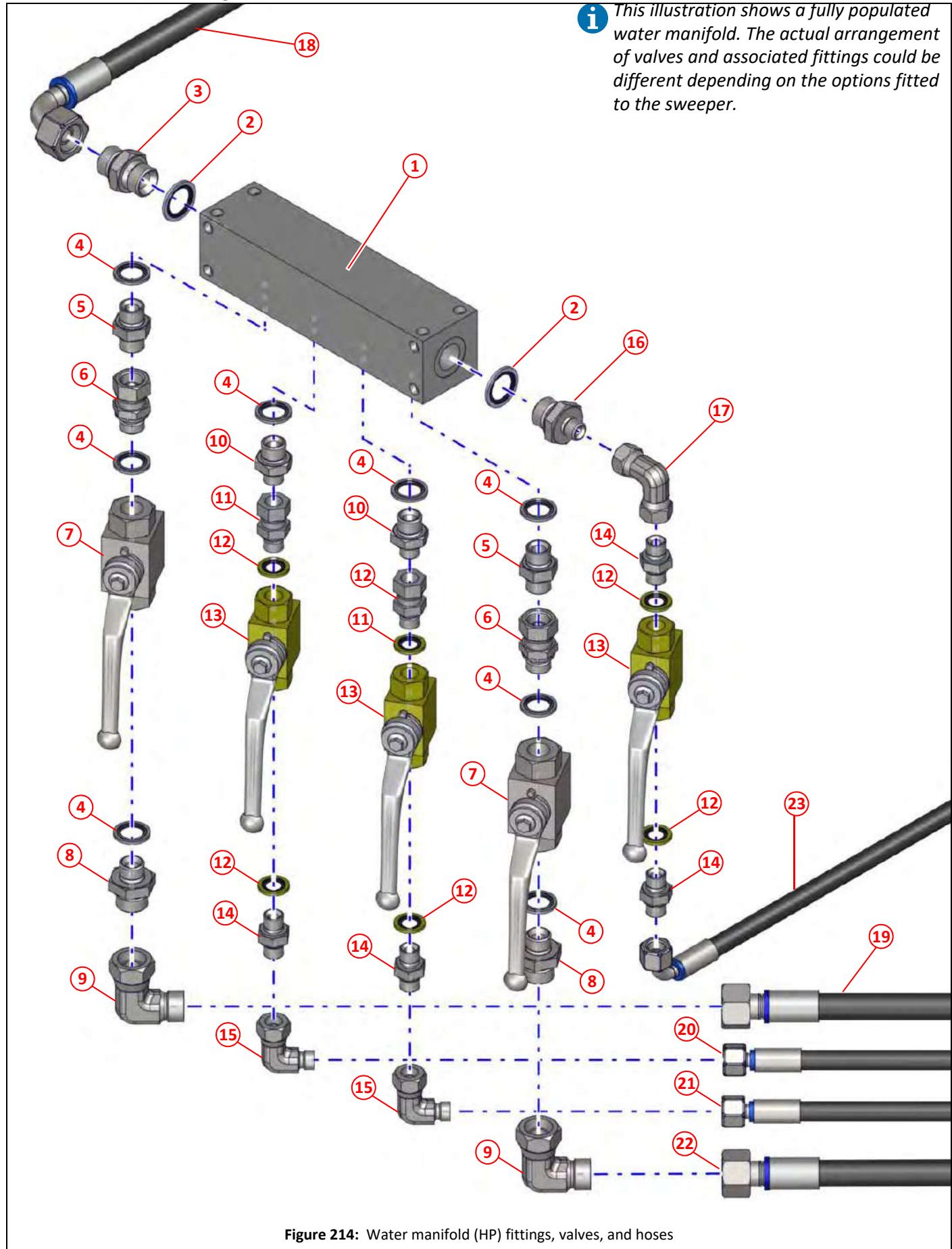
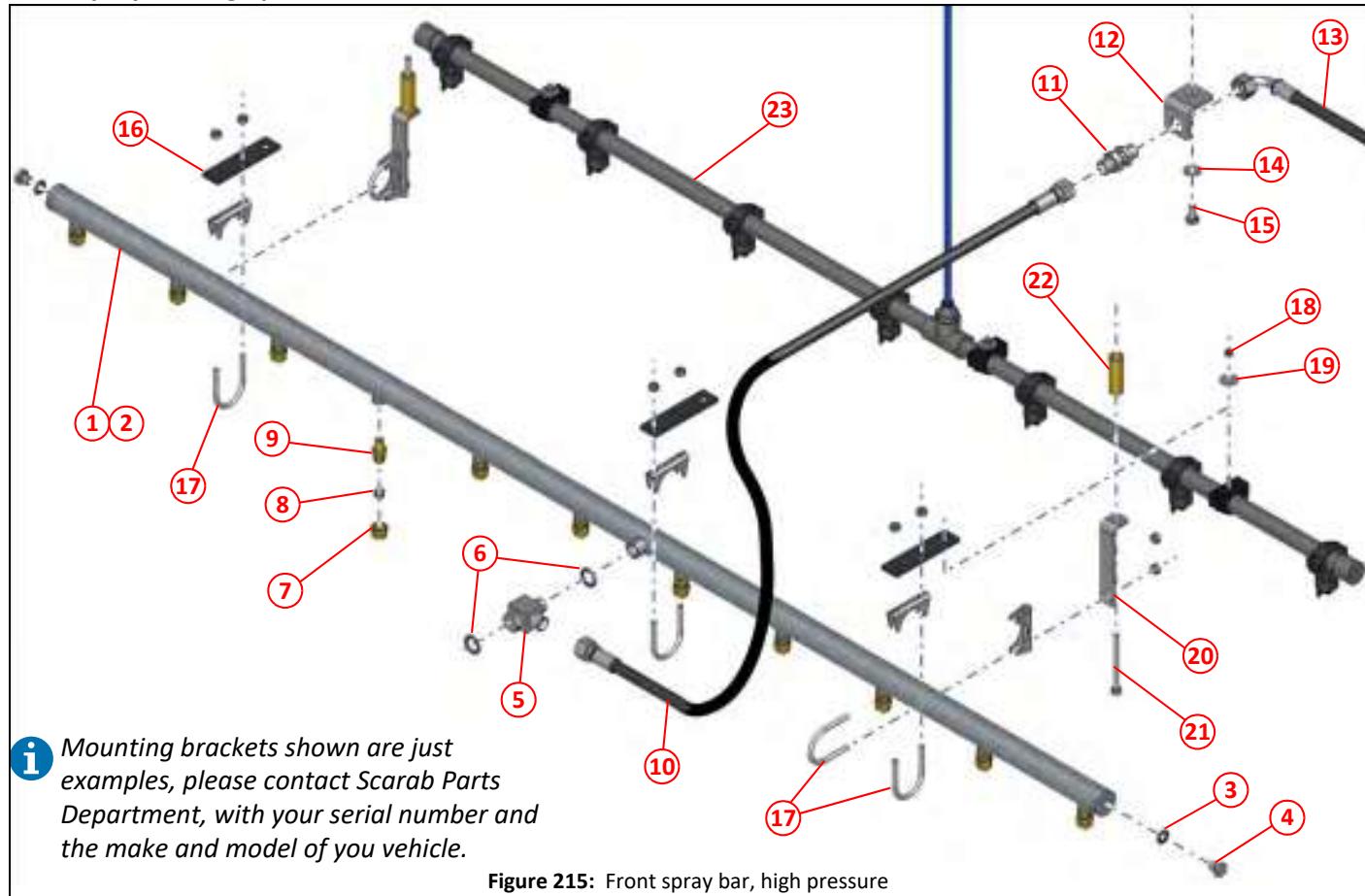


Figure 214: Water manifold (HP) fittings, valves, and hoses

| Item | Part No | Qty | Description  |  |
|------|---------|-----|--|--|
| ①    | 047247  | 1   | Manifold, 2 x $\frac{1}{2}$ " BSP ports and 4 x $\frac{3}{8}$ " BSP ports                              |  |
| ②    | 011154  | 1   | Dowty seal $\frac{1}{2}$ " BSP   |  |
| ③    | 011160  | 1   | Adapter, $\frac{1}{2}$ " BSP   |  |
| ④    | 011153  | 8   | Dowty seal $\frac{3}{8}$ " BSP   |  |
| ⑤    | 011159  | 2   | Adapter, $\frac{3}{8}$ " BSP   |  |
| ⑥    | 002144  | 2   | Adapter, swivel, $\frac{3}{8}$ " BSP, male/female  |  |
| ⑦    | 043201  | 2   | Valve, ball, $\frac{3}{8}$ " BSP, high pressure  |  |
| ⑧    | 011167  | 2   | Adapter, $\frac{1}{2}$ " BSP x $\frac{3}{8}$ " BSP   |  |
| ⑨    | 011173  | 2   | Elbow, swivel, $\frac{1}{2}$ " BSP, male/female  |  |
| ⑩    | 011199  | 2   | Adapter, $\frac{3}{8}$ " BSP x $\frac{1}{4}$ " BSP   |  |
| ⑪    | 002012  | 2   | Adapter, swivel, $\frac{1}{4}$ " BSP, male/female  |  |
| ⑫    | 011152  | 6   | Dowty seal $\frac{1}{4}$ " BSP   |  |
| ⑬    | 011257  | 3   | Valve, ball, $\frac{1}{4}$ " BSP, high pressure  |  |
| ⑭    | 011158  | 4   | Adapter, $\frac{1}{4}$ " BSP   |  |
| ⑮    | 011171  | 2   | Elbow, swivel, $\frac{1}{4}$ " BSP, male/female  |  |
| ⑯    | 011165  | 1   | Adapter, $\frac{1}{2}$ " BSP x $\frac{1}{4}$ " BSP   |  |
| ⑰    | 011169  | 1   | Elbow, swivel, $\frac{1}{4}$ " BSP, female/female  |  |
| ⑱    | 001370  | 1   | Hose $\frac{1}{2}$ " x 2430, straight/90° ends, from HP water pump                                     |  |
| ⑲    | 030992  | 1   | Hose $\frac{1}{2}$ " x 1100, straight/90° ends, to front HP spray bar                                  |  |
| ⑳    | 001104  | 1   | Hose $\frac{1}{4}$ " x 1020, straight/90° ends, MEGAFLEX, to left hand suction nozzle boost spray bar  |  |
| ㉑    | TBA     | 1   | Hose $\frac{1}{4}$ " x XXXX, straight/90° ends, MEGAFLEX, to right hand suction nozzle boost spray bar |  |
| ㉒    | 001242  | 1   | Hose $\frac{1}{2}$ " x 1750, straight/straight ends, to central brush boost spray bar                  |  |
| ㉓    | 001281  | 1   | Hose $\frac{1}{4}$ " x 2800, straight/90° ends, to fan wash  |  |

## Front spray bar, high pressure



| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 031779  | 1   | Front spray bar, high pressure, complete, includes ②, ③, ④, ⑤, ⑥, ⑦, ⑧, & ⑨ |
| ②    | 020405  | 1   | Front spray bar, high pressure, no fittings                                 |
| ③    | 011152  | 2   | Dowty seal $\frac{1}{4}$ " BSP  |
| ④    | 011241  | 2   | Plug $\frac{1}{4}$ " BSP  |
| ⑤    | 011188  | 1   | Banjo $\frac{1}{2}$ " BSP   |
| ⑥    | 011154  | 2   | Dowty seal $\frac{1}{2}$ " BSP  |
| ⑦    | 030951  | 11  | Nozzle cap  |
| ⑧    | 023377  | 11  | Spray jet   |
| ⑨    | 010112  | 11  | Nozzle body   |
| ⑩    | 001066  | 1   | Hose $\frac{1}{2}$ " x 3000, straight ends                                  |
| ⑪    | 011268  | 1   | Adapter, bulkhead, $\frac{1}{2}$ " BSP                                      |
| ⑫    | 025007  | 1   | Angle bracket   |
| ⑬    | 030992  | 1   | Hose, $\frac{1}{2}$ " x 1100, straight/90° ends, from water manifold (HP)   |
| ⑭    | 011094  | 1   | Washer M10  |
| ⑮    | 011030  | 1   | Setscrew HT M10 x 20  |
| ⑯    | 030392  | 3   | Bracket, spray bar  |
| ⑰    | 014983  | 5   | 'U' clamp $1\frac{5}{8}$ "  |
| ⑱    | 011071  | 3   | Nyloc nut T M6  |
| ⑲    | 011099  | 3   | Repair washer, $\frac{1}{4}$ " x $\varnothing 1$ "                          |
| ⑳    | 031921  | 2   | Bracket, HP and LP spray bar  |
| ㉑    | 011019  | 2   | Bolt HT M8 x 90   |
| ㉒    | 012943  | 2   | Spacer, $\varnothing 10.5 \times \varnothing 20 \times 57$                  |
| ㉓    | 047716  | 1   | Front spray bar, low pressure   |

207,240

## Hose reel, high pressure

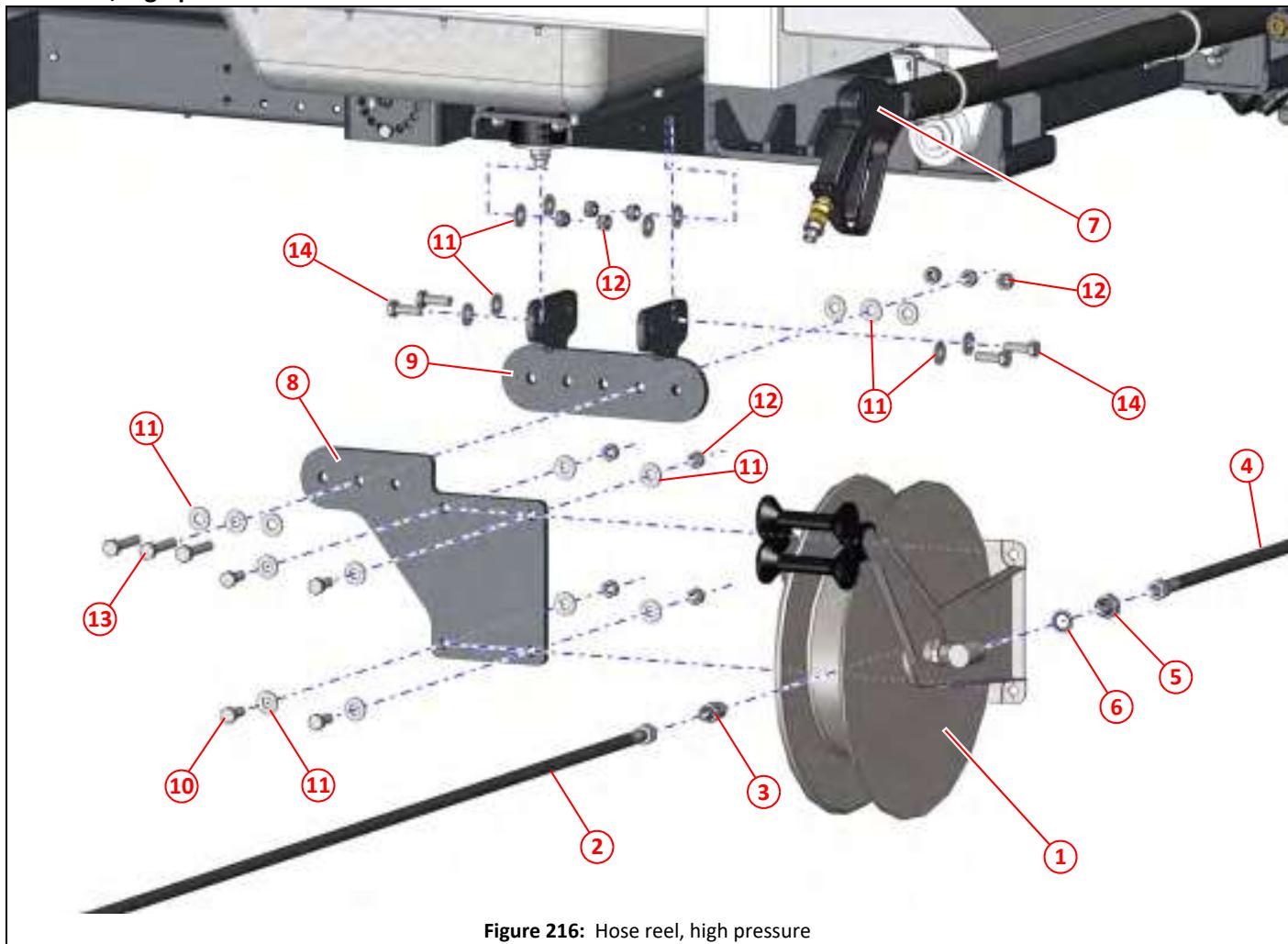
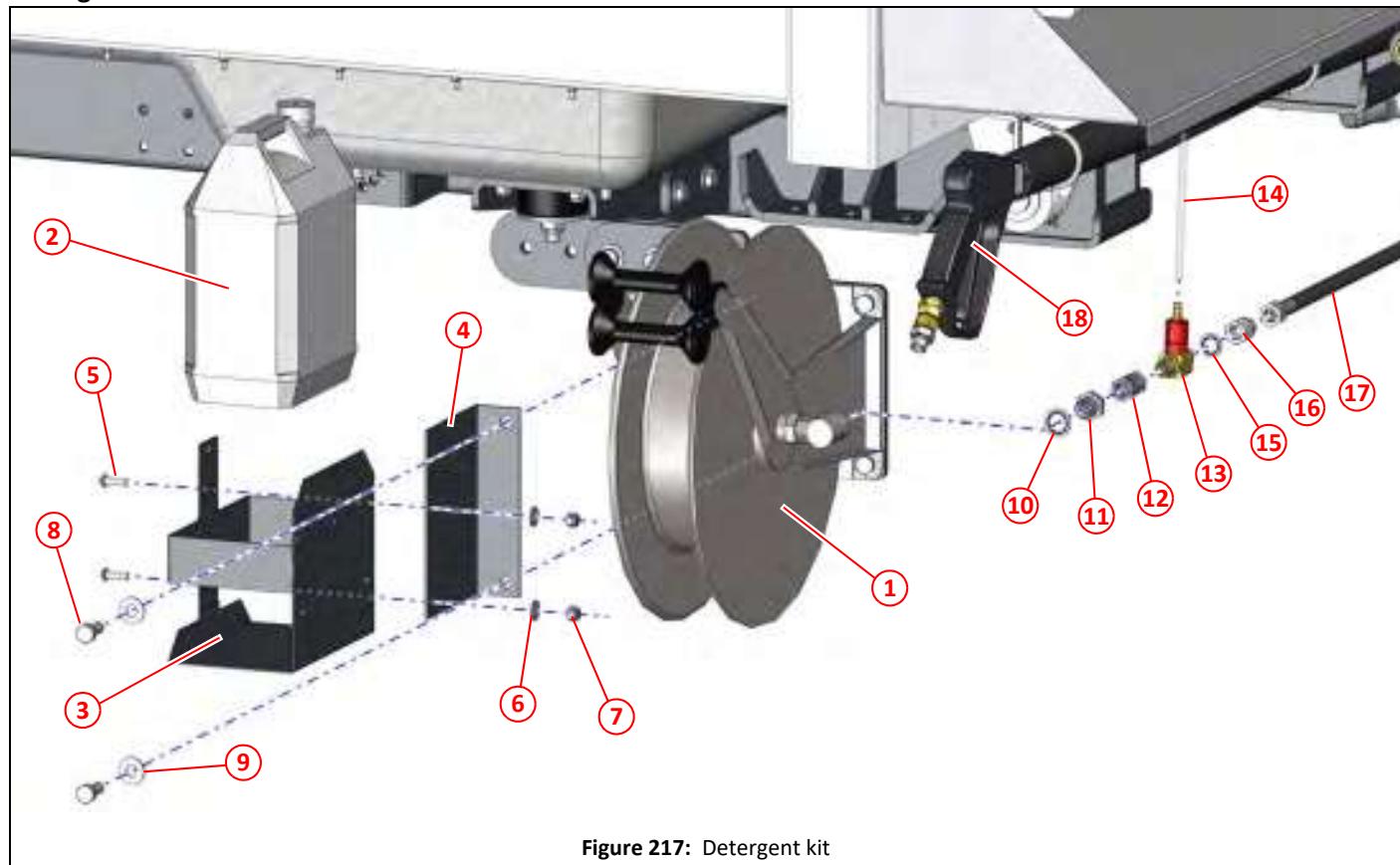


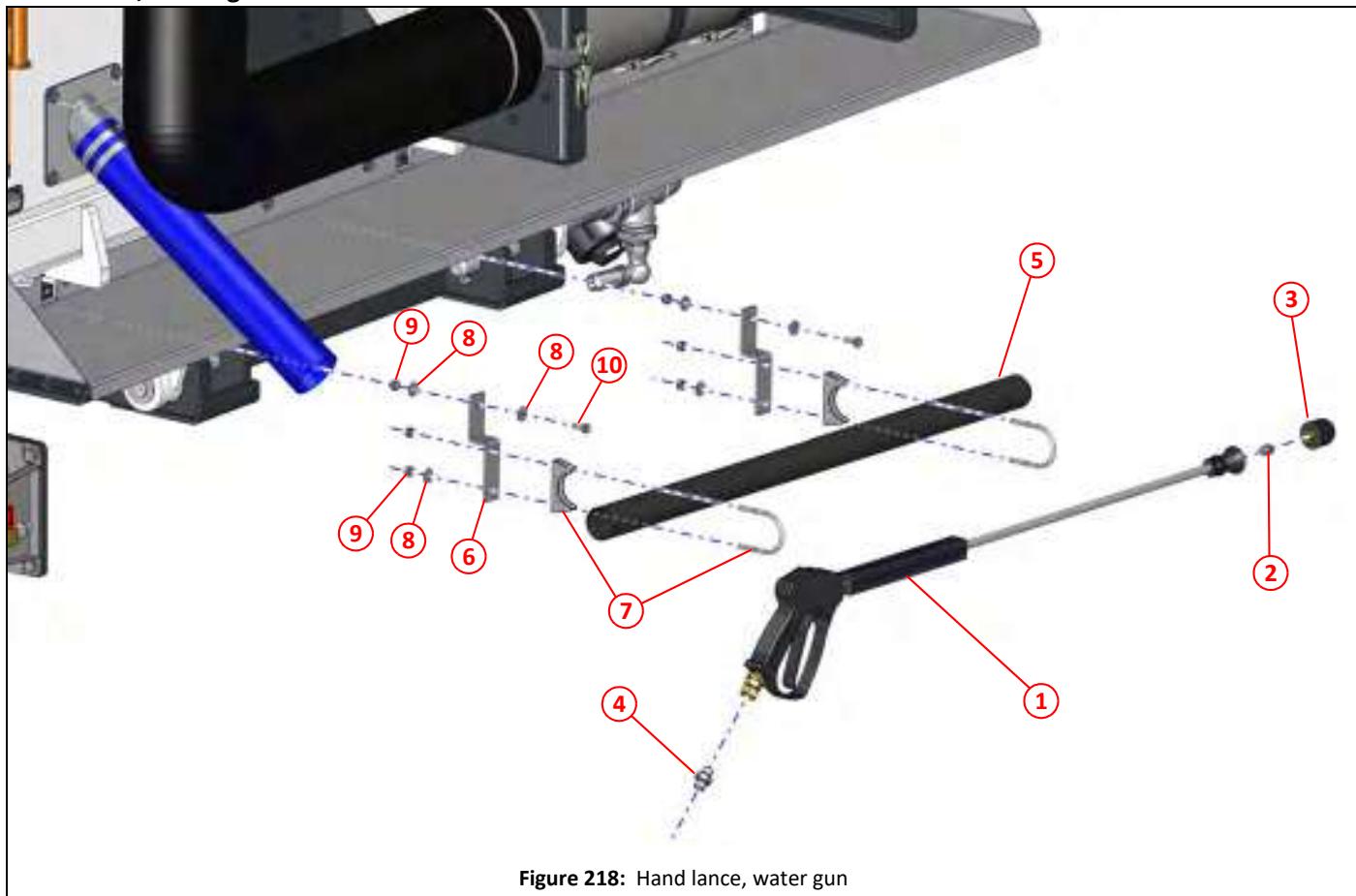
Figure 216: Hose reel, high pressure

| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| ①    | 020451  | 1   | Hose reel, retracting, no hose  |     |
| ②    | 010601  | 1   | Hose, $\frac{3}{8}$ " x 13 Meters   |     |
| ③    | 002204  | 1   | Adapter, $\frac{3}{8}$ BSP x $\frac{1}{2}$ NPT, straight                      |     |
| ④    | 001373  | 1   | Hose, $\frac{3}{8}$ " x 900, straight/90° ends, from high pressure water pump |     |
| ⑤    | 011167  | 1   | Adapter, $\frac{1}{2}$ BSP x $\frac{3}{8}$ BSP                                |     |
| ⑥    | 011154  | 1   | Dowty seal $\frac{1}{2}$ BSP  |     |
| ⑦    | 010748  | 1   | Hand lance, water gun   | 253 |
| ⑧    | 048206  | 1   | Mounting plate, hose reel   |     |
| ⑨    | 048205  | 1   | Bracket, option interface   |     |
| ⑩    | 011052  | 4   | Setscrew HT M12 x 30  |     |
| ⑪    | 011096  | 22  | Washer M12  |     |
| ⑫    | 011077  | 11  | Nyloc nut T M12   |     |
| ⑬    | 011055  | 3   | Bolt HT M12 x 65  |     |
| ⑭    | 011053  | 4   | Setscrew HT M12 x 35  |     |

## Detergent kit



| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| ①    | 020451  | 1   | Hose reel, retracting, no hose  | 251 |
| ②    | 013553  | 1   | Detergent bottle, clear   |     |
| ③    | 010393  | 1   | Bracket, detergent bottle   |     |
| ④    | 028250  | 1   | Support bracket, detergent bottle bracket                                     |     |
| ⑤    | 000281  | 2   | Socket button head screw HD M8 x 25, stainless steel                          |     |
| ⑥    | 000264  | 2   | Washer M8, stainless steel  |     |
| ⑦    | 000263  | 2   | Nyloc nut T M8, stainless steel   |     |
| ⑧    | 011052  | 2   | Setscrew HT M12 x 30  |     |
| ⑨    | 011096  | 2   | Washer M12  |     |
| ⑩    | 011154  | 1   | Dowty seal $\frac{1}{2}$ " BSP  |     |
| ⑪    | 011167  | 1   | Adapter, $\frac{1}{2}$ " BSP x $\frac{3}{8}$ " BSP                            |     |
| ⑫    | 011214  | 1   | Adapter, $\frac{3}{8}$ " BSP, nut/nut   |     |
| ⑬    | 013573  | 1   | Detergent nozzle injector   |     |
| ⑭    | 013575  | 1   | Detergent silicone tube, cut to required length                               |     |
| ⑮    | 011153  | 1   | Dowty seal $\frac{3}{8}$ " BSP  |     |
| ⑯    | 002173  | 1   | Adapter, fixed, $\frac{3}{8}$ " BSP, male/female                              |     |
| ⑰    | 001373  | 1   | Hose, $\frac{3}{8}$ " x 900, straight/90° ends, from high pressure water pump |     |
| ⑱    | 010748  | 1   | Hand lance, water gun   | 253 |

**Hand lance, water gun**

**Figure 218: Hand lance, water gun**

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 010748  | 1   | Hand lance, water gun  |
| ②    | 020758  | 1   | Nozzle 1520  |
| ③    | 013574  | 1   | Detergent nozzle   |
| ④    | 011159  | 1   | Adapter, $\frac{3}{8}$ " BSP, to hose from hose reel                             |
| ⑤    | 025473  | 1   | Lance stowage  |
| ⑥    | 032265  | 2   | Lance holder mount, short  |
| ⑦    | 012901  | 2   | 'U' clamp, 2", please note that the original nuts are replaced with item ⑧ and ⑨ |
| ⑧    | 011092  | 6   | Washer M8  |
| ⑨    | 011073  | 6   | Nyloc nut T M8   |
| ⑩    | 011010  | 2   | Setscrew HT M8 x 20  |

## Boost spray bar - Rear of LH suction nozzle

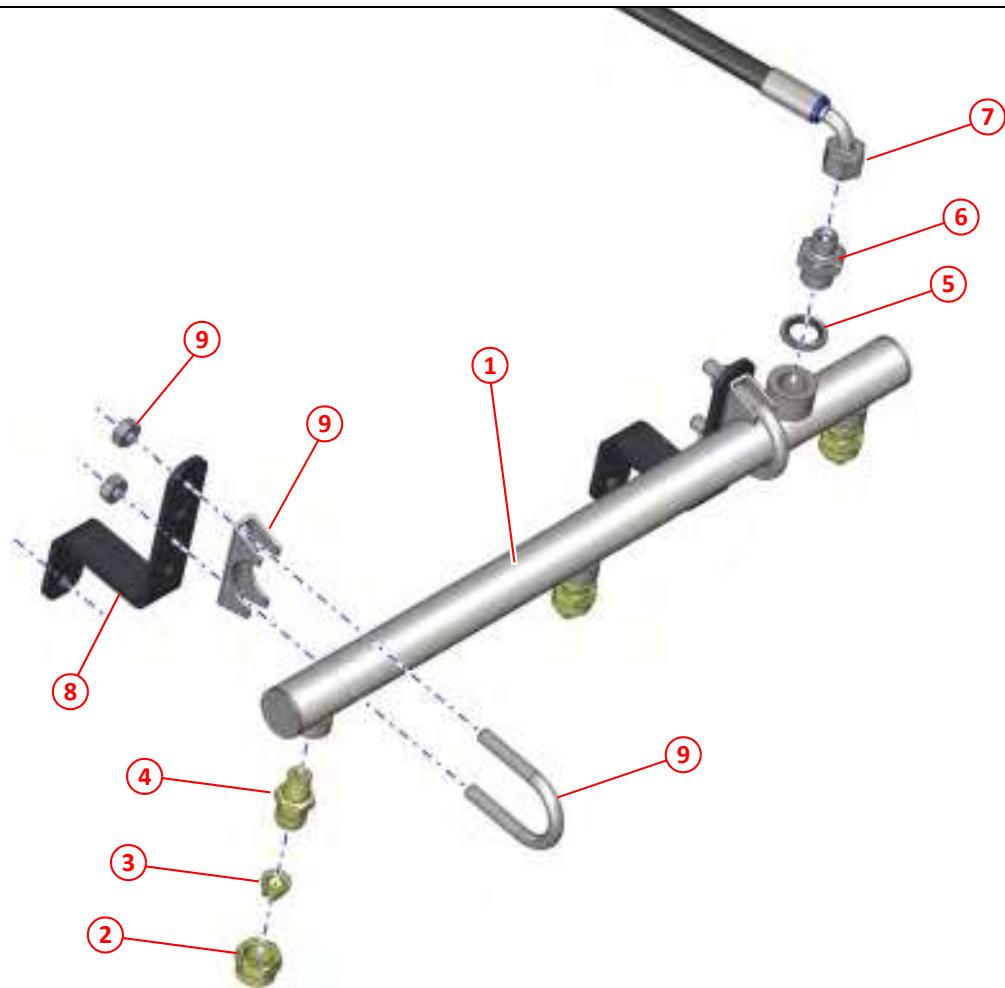


Figure 219: Boost spray bar - Rear of LH suction nozzle

| Item | Part No  | Qty | Description  |
|------|----------|-----|--|
| ①    | 047314   | 1   | Boost spray bar, suction nozzle  |
| ②    | 030951 * | 1   | Nozzle cap   |
| ③    | 012316 * | 1   | Spray jet TPU-8004   |
| ④    | 010112 * | 1   | Nozzle body  |
| ⑤    | 011153   | 1   | Dowty seal $\frac{3}{8}$ " BSP   |
| ⑥    | 011199   | 1   | Adapter, $\frac{3}{8}$ " BSP x $\frac{1}{4}$ " BSP                                 |
| ⑦    | 001104   | 1   | Hose $\frac{1}{4}$ " x 1020, straight/90° ends, MEGAFLEX, from water manifold (HP) |
| ⑧    | 047358   | 2   | Bracket, boost spray bar, suction nozzle, uses existing bolts in suction nozzle    |
| ⑨    | 020774   | 2   | 'U' clamp $1\frac{1}{4}$ "   |

\*. Quantity per nozzle

## Boost spray bar - Rear of RH suction nozzle

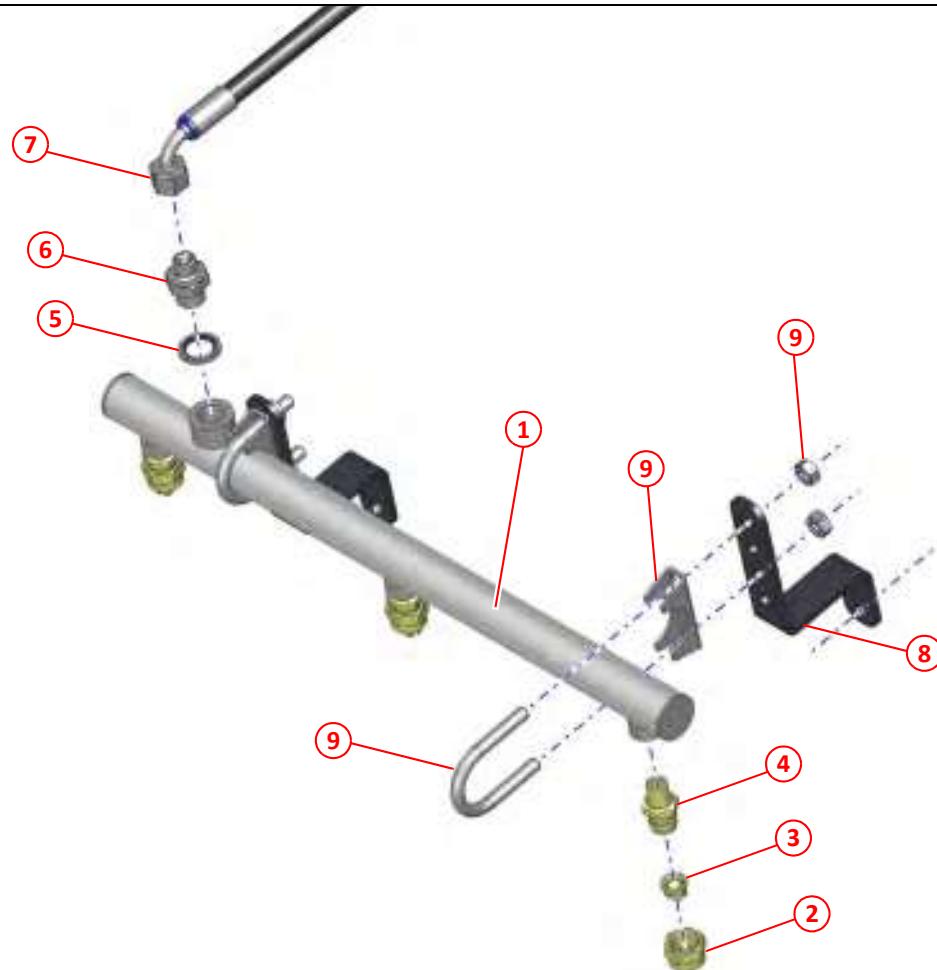
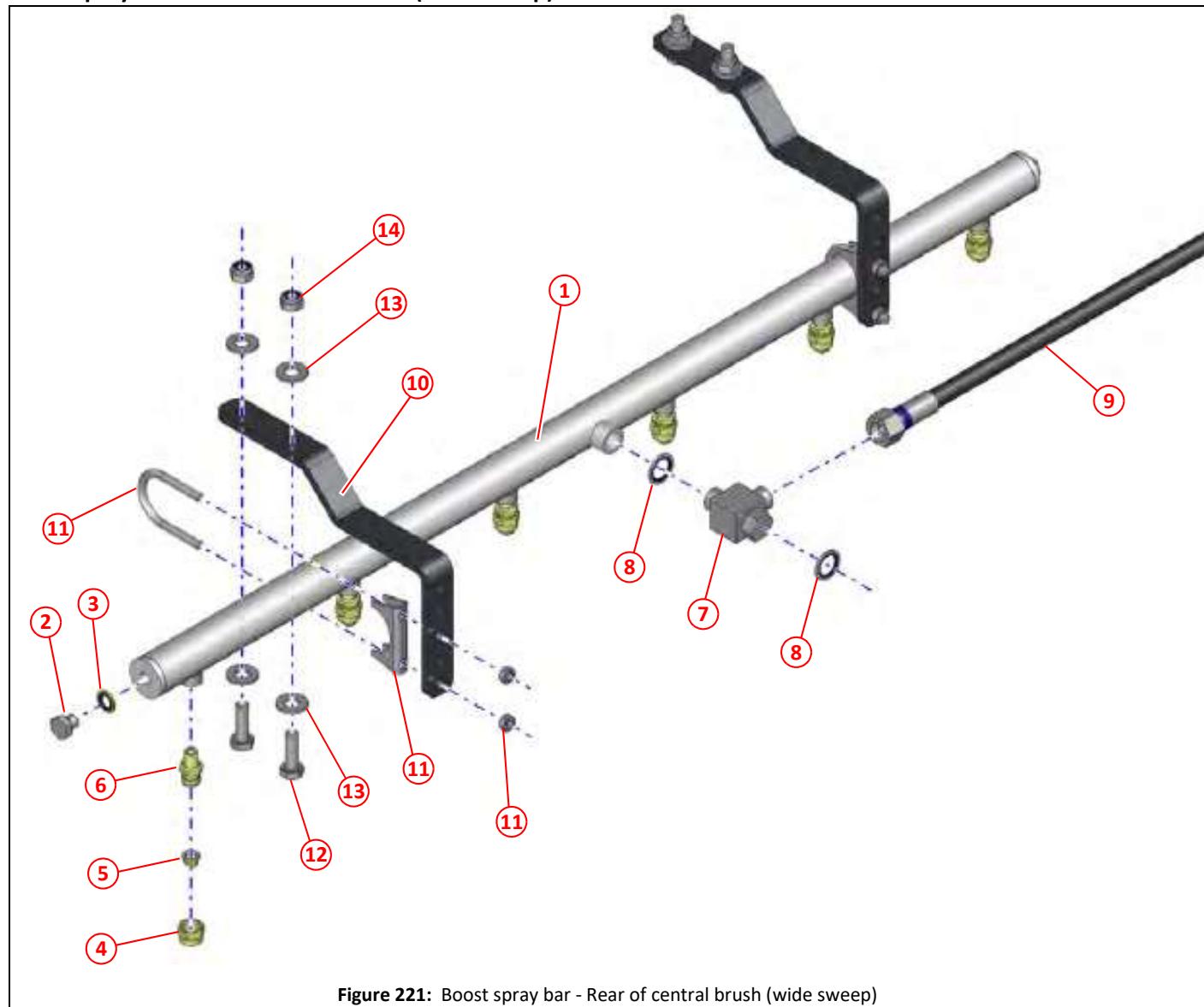


Figure 220: Boost spray bar - Rear of RH suction nozzle

| Item | Part No  | Qty | Description  |
|------|----------|-----|--|
| ①    | 047314   | 1   | Boost spray bar, suction nozzle  |
| ②    | 030951 * | 1   | Nozzle cap   |
| ③    | 012316 * | 1   | Spray jet TPU-8004   |
| ④    | 010112 * | 1   | Nozzle body  |
| ⑤    | 011153   | 1   | Dowty seal $\frac{3}{8}$ " BSP   |
| ⑥    | 011199   | 1   | Adapter, $\frac{3}{8}$ " BSP x $\frac{1}{4}$ " BSP                                 |
| ⑦    | 001104   | 1   | Hose $\frac{1}{4}$ " x 1020, straight/90° ends, MEGAFLEX, from water manifold (HP) |
| ⑧    | 047358   | 2   | Bracket, boost spray bar, suction nozzle, uses existing bolts in suction nozzle    |
| ⑨    | 020774   | 2   | 'U' clamp $1\frac{1}{4}$ "   |

\*. Quantity per nozzle

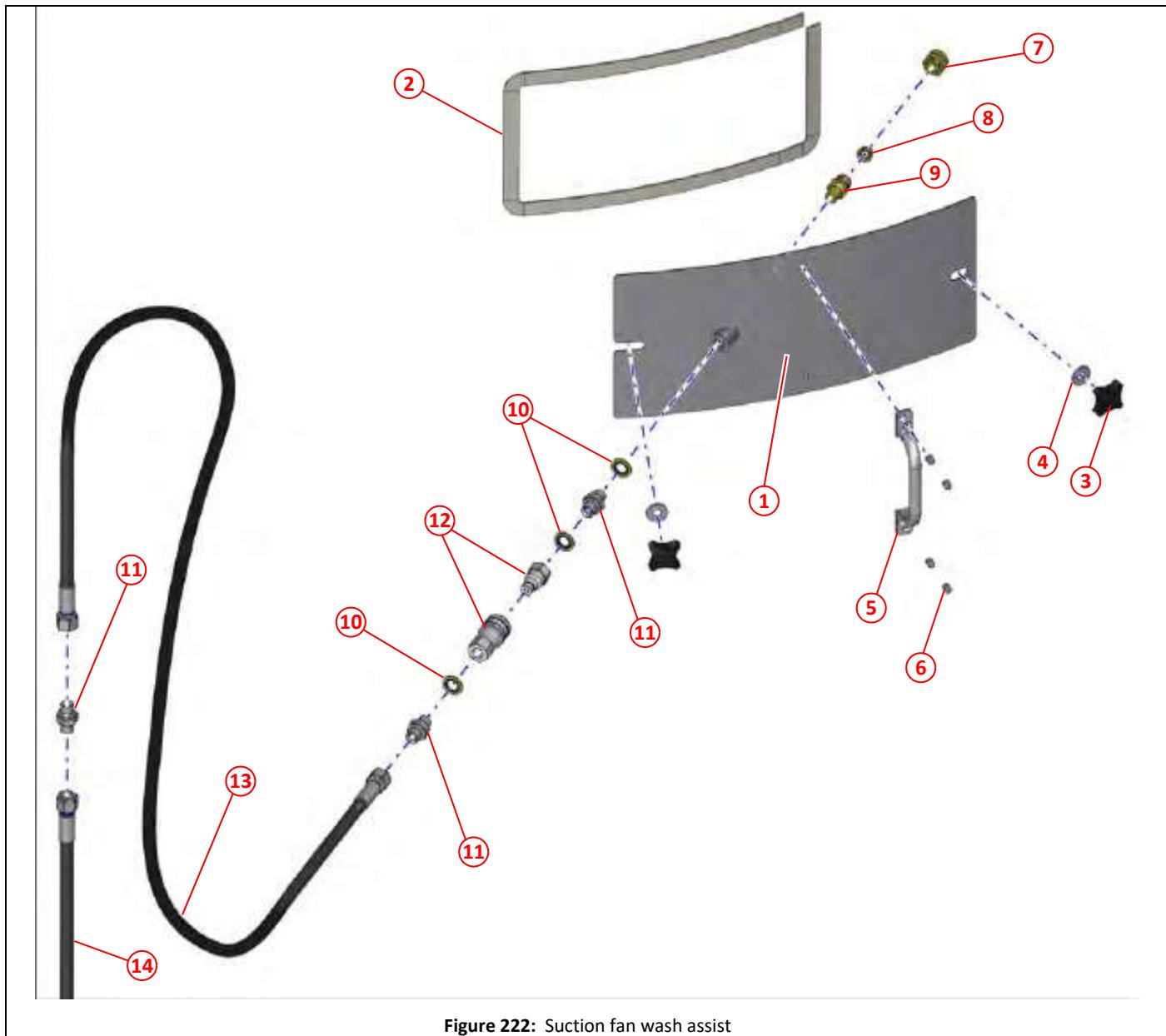
## Boost spray bar - Rear of central brush (wide sweep)



| Item | Part No  | Qty | Description  |
|------|----------|-----|--|
| ①    | 041451   | 1   | Boost spray bar, rear of central brush (wide sweep)    |
| ②    | 011241   | 2   | Plug $\frac{1}{4}$ " BSP                               |
| ③    | 011152   | 2   | Dowty seal $\frac{1}{4}$ " BSP                         |
| ④    | 030951 * | 1   | Nozzle cap   |
| ⑤    | 012316 * | 1   | Spray jet TPU-8004                                     |
| ⑥    | 010112 * | 1   | Nozzle body  |
| ⑦    | 011188   | 1   | Banjo, $\frac{1}{2}$ " BSP                             |
| ⑧    | 011154   | 2   | Dowty seal $\frac{1}{2}$ " BSP                         |
| ⑨    | 001242   | 1   | Hose $\frac{1}{2}$ " x 1750, straight ends             |
| ⑩    | 041452   | 2   | Bracket, central brush (wide sweep) spray bar mounting |
| ⑪    | 014983   | 2   | 'U' clamp $1\frac{5}{8}$ "                             |
| ⑫    | 011053   | 4   | Setscrew HT M12 x 35                                   |
| ⑬    | 011096   | 8   | Washer M12   |
| ⑭    | 011077   | 4   | Nyloc nut T M12  |

\*. Quantity per nozzle

## Suction fan wash assist



| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 030731  | 1   | Cover plate, quick release, fan wash assist               |
| ②    | 005020  | 1   | Sealing strip, expanding, 25 x 15, cut to required length |
| ③    | 000248  | 2   | Grip nut, M8, with brass insert                           |
| ④    | 000264  | 2   | Washer M8, stainless steel                                |
| ⑤    | 010502  | 1   | Pull handle   |
| ⑥    | 011124  | 4   | Blind rivet, ø4.0 x 10                                    |
| ⑦    | 030951  | 1   | Nozzle cap  |
| ⑧    | 012926  | 1   | Spray jet TPU-8006  |
| ⑨    | 010112  | 1   | Nozzle body   |
| ⑩    | 011152  | 3   | Dowty seal 1/4" BSP                                       |
| ⑪    | 011158  | 3   | Adapter 1/4" BSP  |
| ⑫    | 012985  | 1   | Quick release coupling, 1/4" BSP                          |
| ⑬    | 001002  | 1   | Hose, 1/4" x 3700, straight ends                          |
| ⑭    | 001281  | 1   | Hose, 1/4" x 2800, straight/90° ends                      |

## Water tank filler arrangement

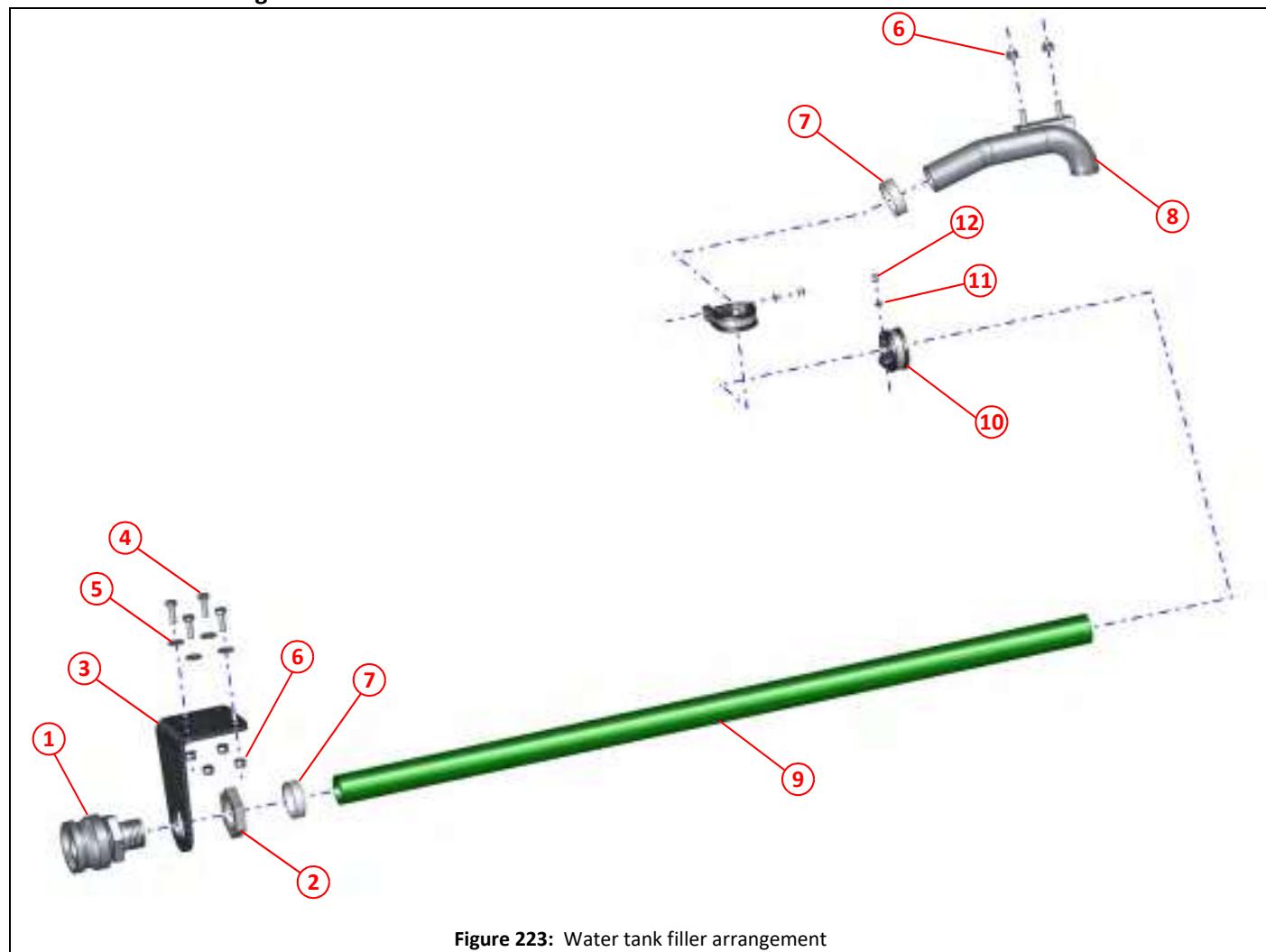


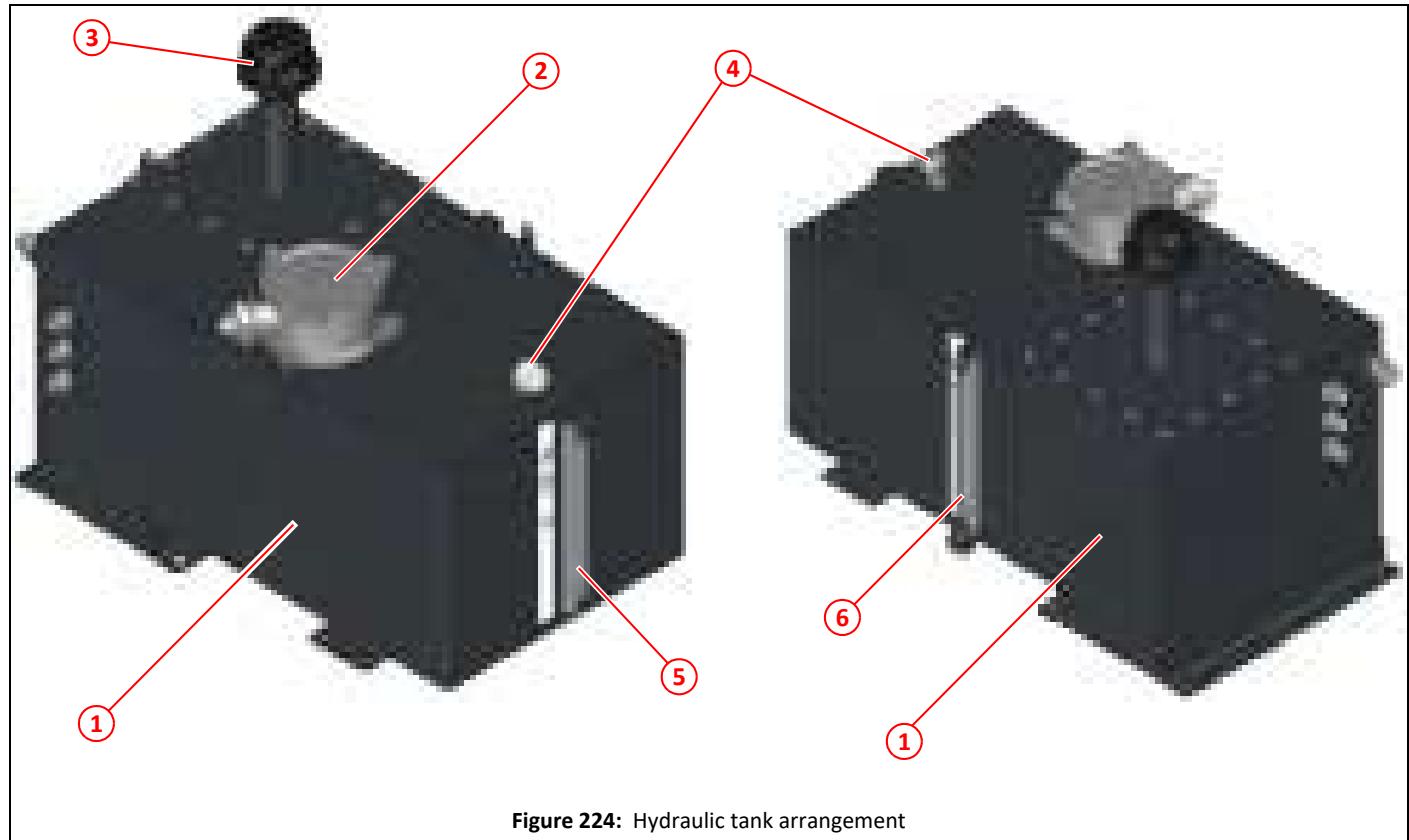
Figure 223: Water tank filler arrangement

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 025140  | 1   | Hydrant adapter                                       |
| ②    | 003026  | 1   | Back nut, 1½" BSP                                     |
| ③    | 044758  | 1   | Bracket, hydrant adapter                              |
| ④    | 000257  | 4   | Setscrew M8 x 25, stainless steel                     |
| ⑤    | 000264  | 4   | Washer M8, stainless steel                            |
| ⑥    | 000263  | 6   | Nyloc nut T M8, stainless steel                       |
| ⑦    | 003007  | 2   | Jubilee clip No. 2A [Ø35 - Ø50]                       |
| ⑧    | 034388  | 1   | Filler pipe   |
| ⑨    | 001045  | 1   | Hose, green medium duty, Ø1½", cut to required length |
| ⑩    | 005055  | 2   | Clip Ø50  |
| ⑪    | 000410  | 2   | Washer M5   |
| ⑫    | 011131  | 2   | Seal blind rivet Ø4.8 x 18                            |

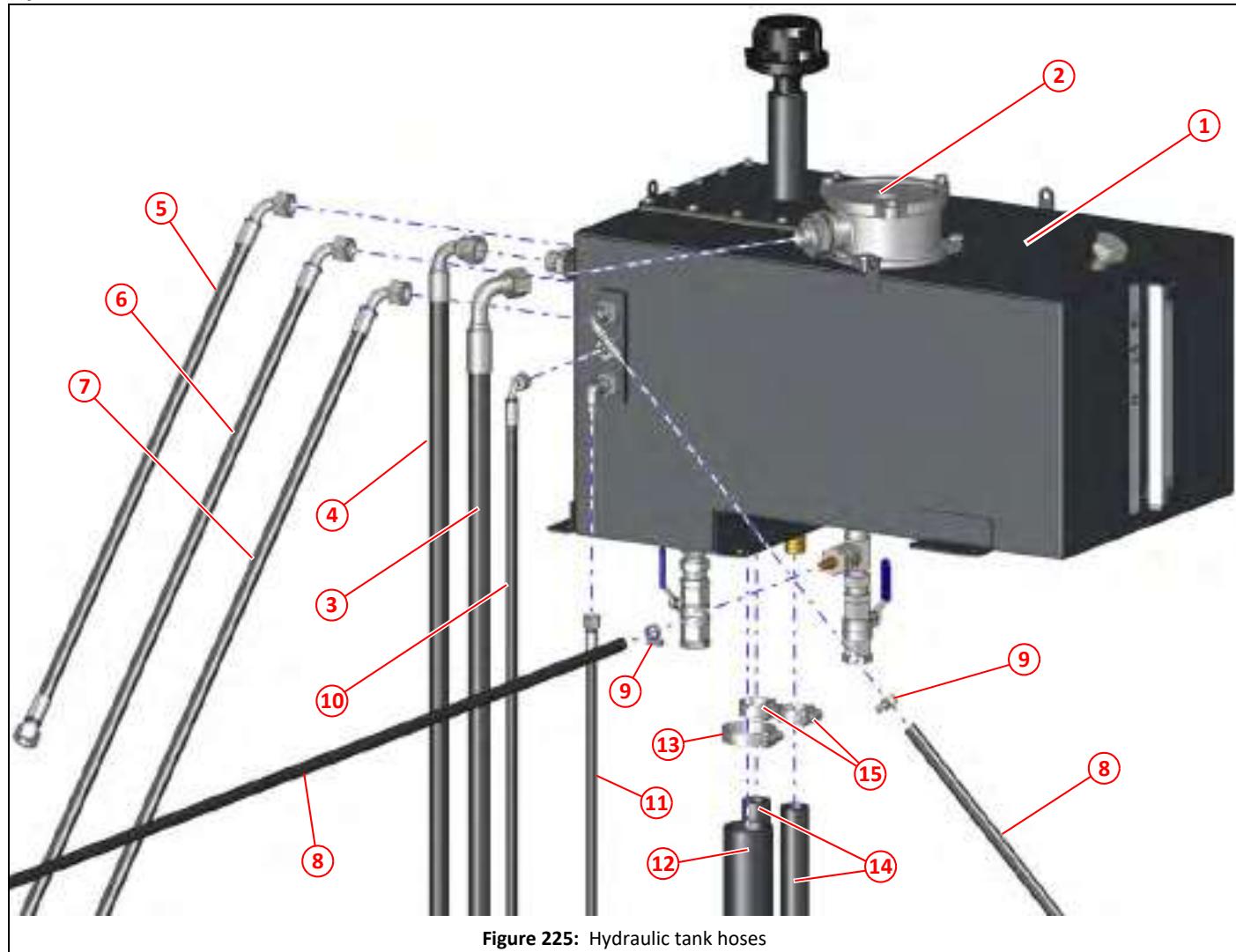
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## Engine frame hydraulics

## Hydraulic tank arrangement



| Item | Part No | Qty | Description                    |
|------|---------|-----|--------------------------------|
| ①    | 046937  | 1   | Hydraulic oil tank             |
| ②    | 013123  | 1   | Filter, return                 |
| ③    | 045445  | 1   | Breather, filler               |
| ④    | 011136  | 1   | Plug, filler 1" BSP            |
| ⑤    | 023155  | 1   | Fluid level gauge              |
| ⑥    | 024039  | 1   | Fluid level gauge, with switch |

**Hydraulic tank hoses**


| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 046937  | 1   | Hydraulic oil tank   |
| ②    | 013123  | 1   | Filter, return   |
| ③    | 001375  | 1   | Hose $\frac{3}{4}''$ x 6225, straight and 90° ends, return from suction fan            |
| ④    | 001073  | 1   | Hose $\frac{5}{8}''$ x 1600, with $\frac{3}{4}''$ BSP straight and 90° ends            |
| ⑤    | 001368  | 1   | Hose $\frac{1}{2}''$ x 3370, straight and 90° ends                                     |
| ⑥    | 001345  | 1   | Hose $\frac{1}{2}''$ x 2900, straight and 90° ends, from option valve block            |
| ⑦    | 001348  | 1   | Hose $\frac{1}{2}''$ x 1400, straight and 90° ends                                     |
| ⑧    | 010958  | 2   | Hose $\frac{3}{8}''$ , cut to required length(s)                                       |
| ⑨    | 010516  | 2   | Jubilee clip No. MOO [ $\varnothing 11\text{-}\varnothing 16\text{mm}$ ]               |
| ⑩    | 001104  | 1   | Hose $\frac{1}{4}''$ x 1020, straight and 90° ends                                     |
| ⑪    | 001378  | 1   | Hose $\frac{1}{4}''$ x 5425, straight and 90° ends                                     |
| ⑫    | 047366  | 1   | Hose SD MEGAFLEX $\varnothing 2''$ $\varnothing 51\text{mm}$ , cut to required length  |
| ⑬    | 028778  | 1   | Jubilee clip, high torque size 70 [ $\varnothing 55\text{-}\varnothing 70\text{mm}$ ]  |
| ⑭    | 014827  | 2   | Hose $\varnothing 1''$ , cut to required length(s)                                     |
| ⑮    | 014828  | 2   | Jubilee clip, high torque, size 40 [ $\varnothing 30\text{-}\varnothing 40\text{mm}$ ] |

## Hydraulic tank hose fittings

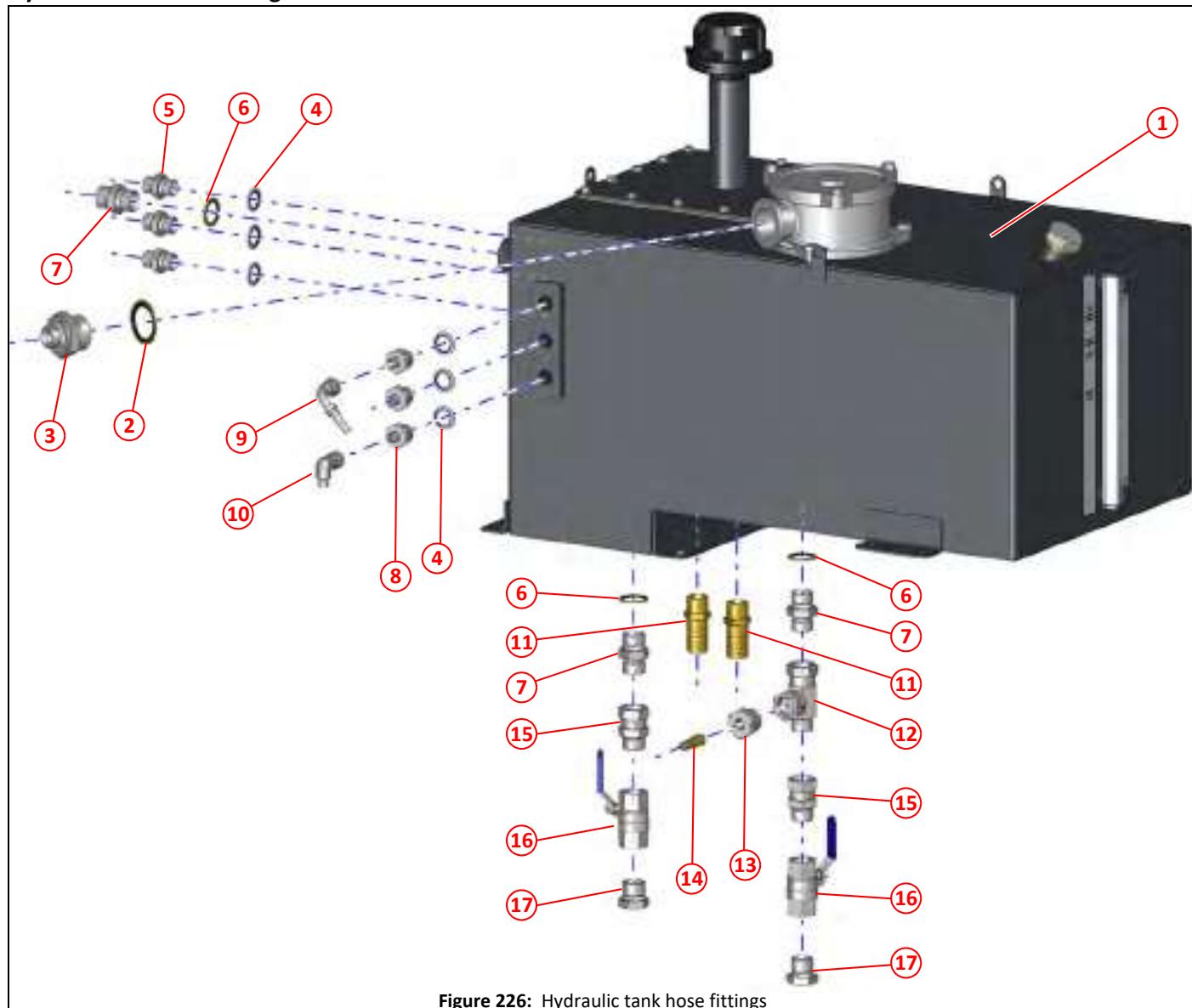


Figure 226: Hydraulic tank hose fittings

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 046937  | 1   | Hydraulic oil tank  |
| ②    | 011150  | 1   | Dowty seal 1 $\frac{1}{4}$ " BSP                                    |
| ③    | 011184  | 1   | Adapter 1 $\frac{1}{4}$ " x 3 $\frac{1}{2}$ " reducer               |
| ④    | 011154  | 6   | Dowty seal 1 $\frac{1}{2}$ " BSP                                    |
| ⑤    | 011160  | 3   | Adapter 1 $\frac{1}{2}$ " BSP, male/male                            |
| ⑥    | 011155  | 3   | Dowty seal 3 $\frac{1}{4}$ " BSP                                    |
| ⑦    | 011161  | 3   | Adapter 3 $\frac{1}{4}$ " BSP                                       |
| ⑧    | 011165  | 1   | Adapter 1 $\frac{1}{2}$ " x 1 $\frac{1}{4}$ " BSP                   |
| ⑨    | 002237  | 1   | Hosetail 1 $\frac{1}{4}$ " BSPPF x 3 $\frac{1}{8}$ " hose, 90°      |
| ⑩    | 011171  | 1   | Elbow, swivel, 1 $\frac{1}{4}$ " BSP, male/female                   |
| ⑪    | 010931  | 1   | Hosetail 3 $\frac{1}{4}$ " male x 1" hosetail                       |
| ⑫    | 002233  | 1   | Tee 3 $\frac{1}{4}$ " BSP, male/female/female, nut on branch        |
| ⑬    | 021524  | 1   | Filler plug 3 $\frac{1}{4}$ " BSP X 1 $\frac{1}{4}$ " BSPT, reducer |
| ⑭    | 003010  | 1   | Hosetail 1 $\frac{1}{4}$ " BSPT x 3 $\frac{1}{8}$ " hose            |
| ⑮    | 012228  | 2   | Adapter 3 $\frac{1}{4}$ " BSP x 3 $\frac{1}{4}$ " BSP, male/female  |
| ⑯    | 013757  | 2   | Valve, ball 3 $\frac{1}{4}$ " BSP                                   |
| ⑰    | 011244  | 2   | Plug 3 $\frac{1}{4}$ " BSP  |

## Hydraulic tank filters and fittings

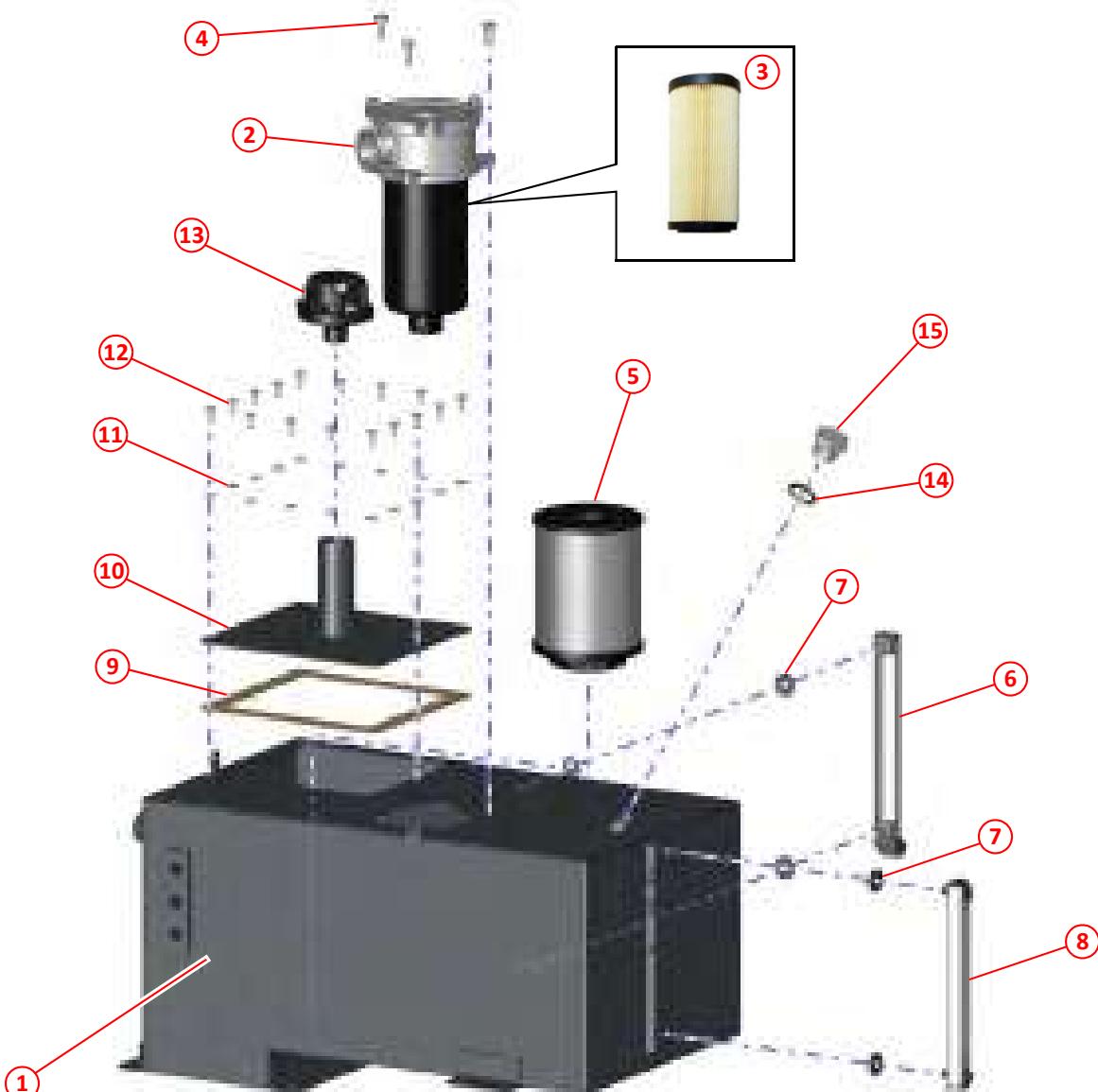


Figure 227: Hydraulic tank filters and fittings

| Item | Part No | Qty | Description                                |
|------|---------|-----|--|
| ①    | 046937  | 1   | Hydraulic oil tank                         |
| ②    | 013123  | 1   | Filter, return, includes filter element    |
| ③    | 013125  | 1   | Filter element, return filter              |
| ④    | 011031  | 3   | Setscrew M10 x 25                          |
| ⑤    | 048212  | 1   | Strainer filter - 2.5" BSP ø150, 90 micron |
| ⑥    | 024039  | 1   | Fluid level gauge, with switch             |
| ⑦    | 036794  | 4   | Rubber sealing washer ø30 x ø12 x 4        |
| ⑧    | 023155  | 1   | Fluid level gauge                          |
| ⑨    | 046938  | 1   | Gasket, oil tank                           |
| ⑩    | 046939  | 1   | Oil tank lid                               |
| ⑪    | 011090  | 16  | Washer M6                                  |
| ⑫    | 011001  | 16  | Setscrew M6 x 16                           |
| ⑬    | 045445  | 1   | Breather, filler                           |

## Hydraulic fan pump and gear pumps

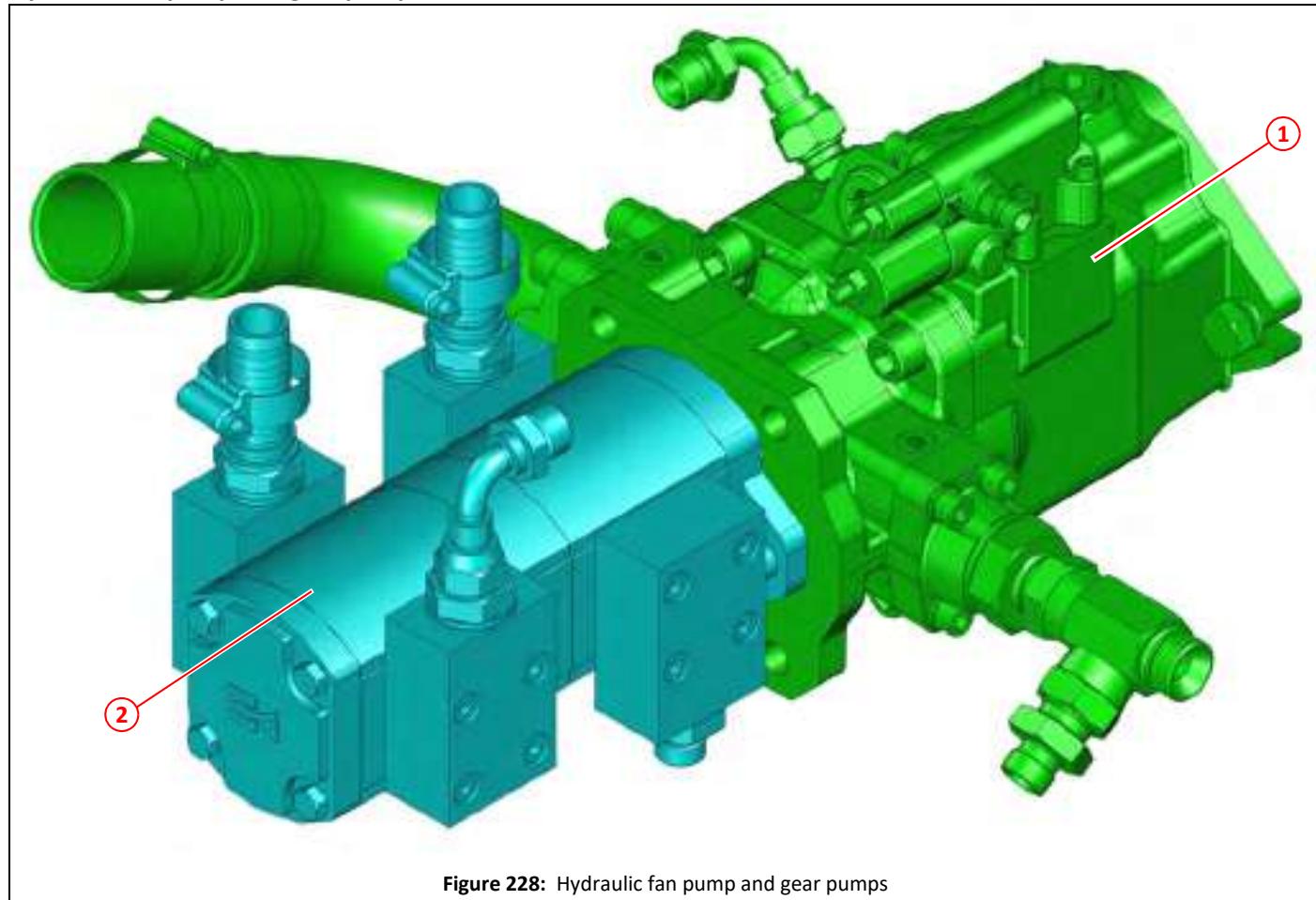


Figure 228: Hydraulic fan pump and gear pumps

| Item | Part No | Qty | Description           |
|------|---------|-----|-----------------------|
| ①    | 026235  | 1   | Fan pump, A10VO60     |
| ②    | 031970  | 1   | Gear pump 23cc double |
| NI   | 031971  | 1   | Gear pump 23cc single |

## Hydraulic fan pump hoses

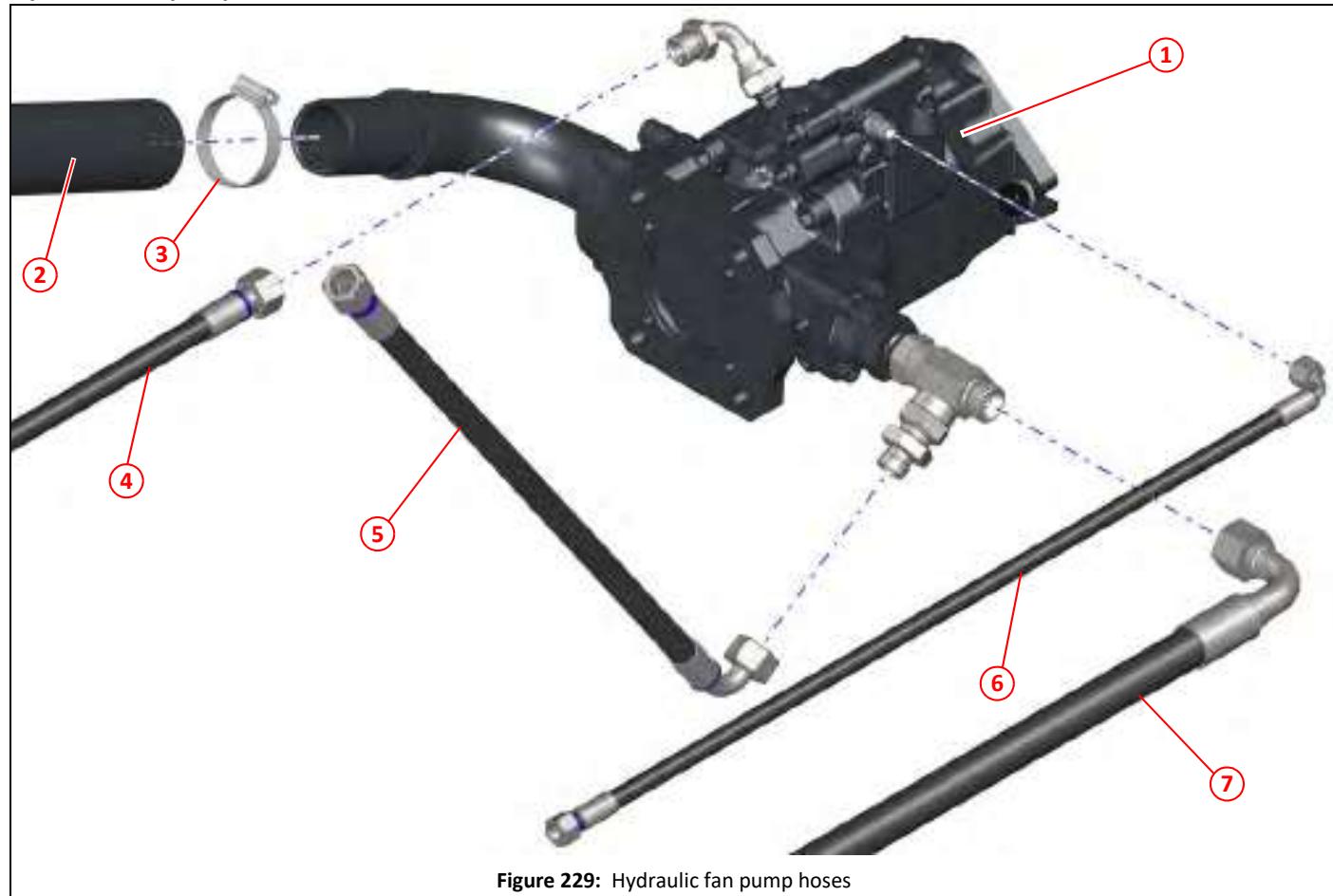


Figure 229: Hydraulic fan pump hoses

| Item | Part No | Qty | Description  | File |
|------|---------|-----|--|------|
| ①    | 026235  | 1   | Fan pump, A10VO60  |      |
| ②    | 047366  | 1   | Hose SD MEGAFLEX $\varnothing 2''$ $\varnothing 51mm$ , cut to required length |      |
| ③    | 012928  | 1   | Jubilee clip No. 2X [ $\varnothing 45 - \varnothing 60$ ]                      |      |
| ④    | 001348  | 1   | Hose $\frac{1}{2}''$ x 1400, straight and 90° ends                             |      |
| ⑤    | 001076  | 1   | Hose $\frac{1}{2}''$ x 600, straight and 90° ends                              |      |
| ⑥    | 001287  | 1   | Hose $\frac{1}{4}''$ x 715, straight and 90° ends                              |      |
| ⑦    | 001374  | 1   | Hose $\frac{3}{4}''$ x 5900, straight and 90° ends                             |      |

## Hydraulic fan pump hose fittings

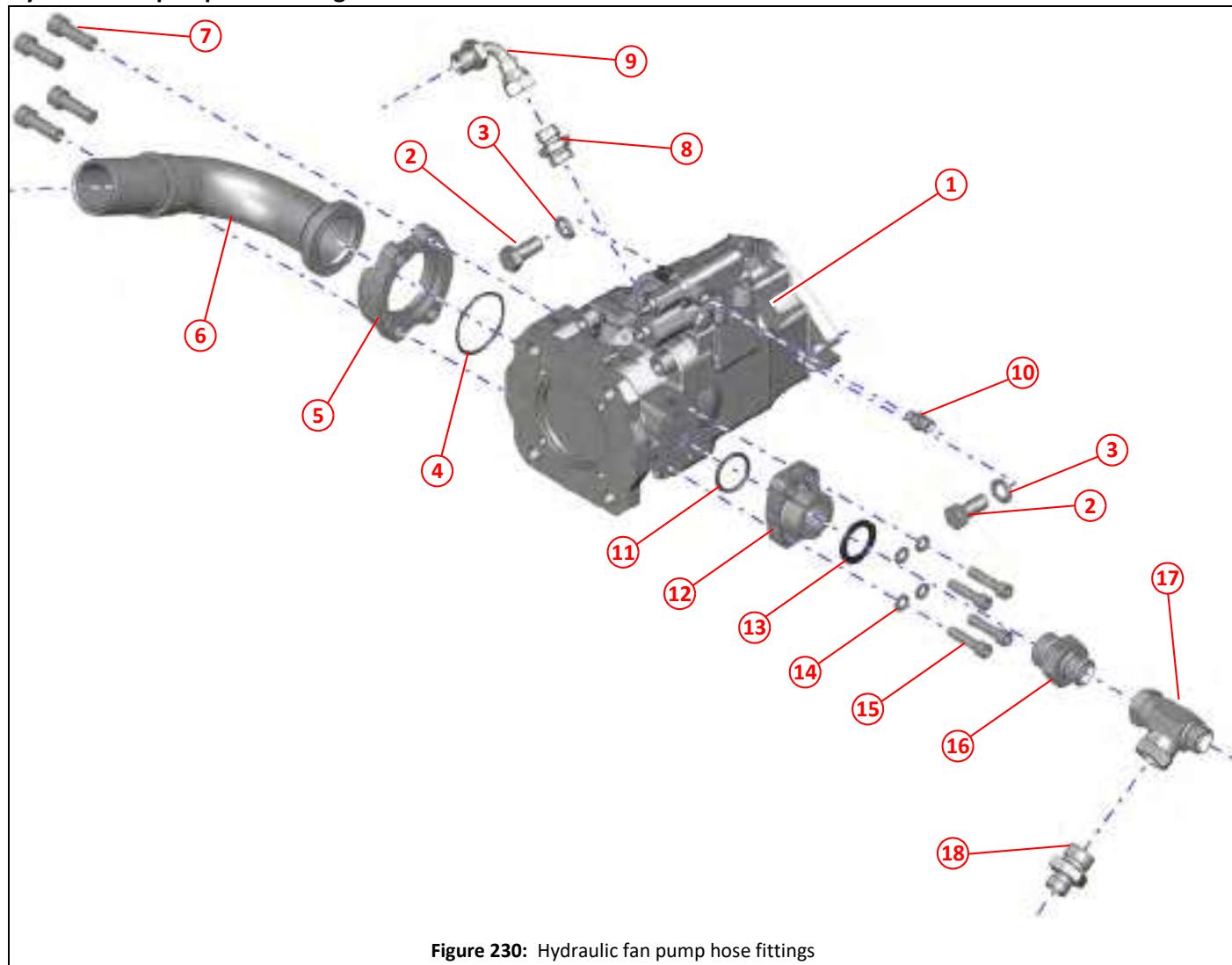
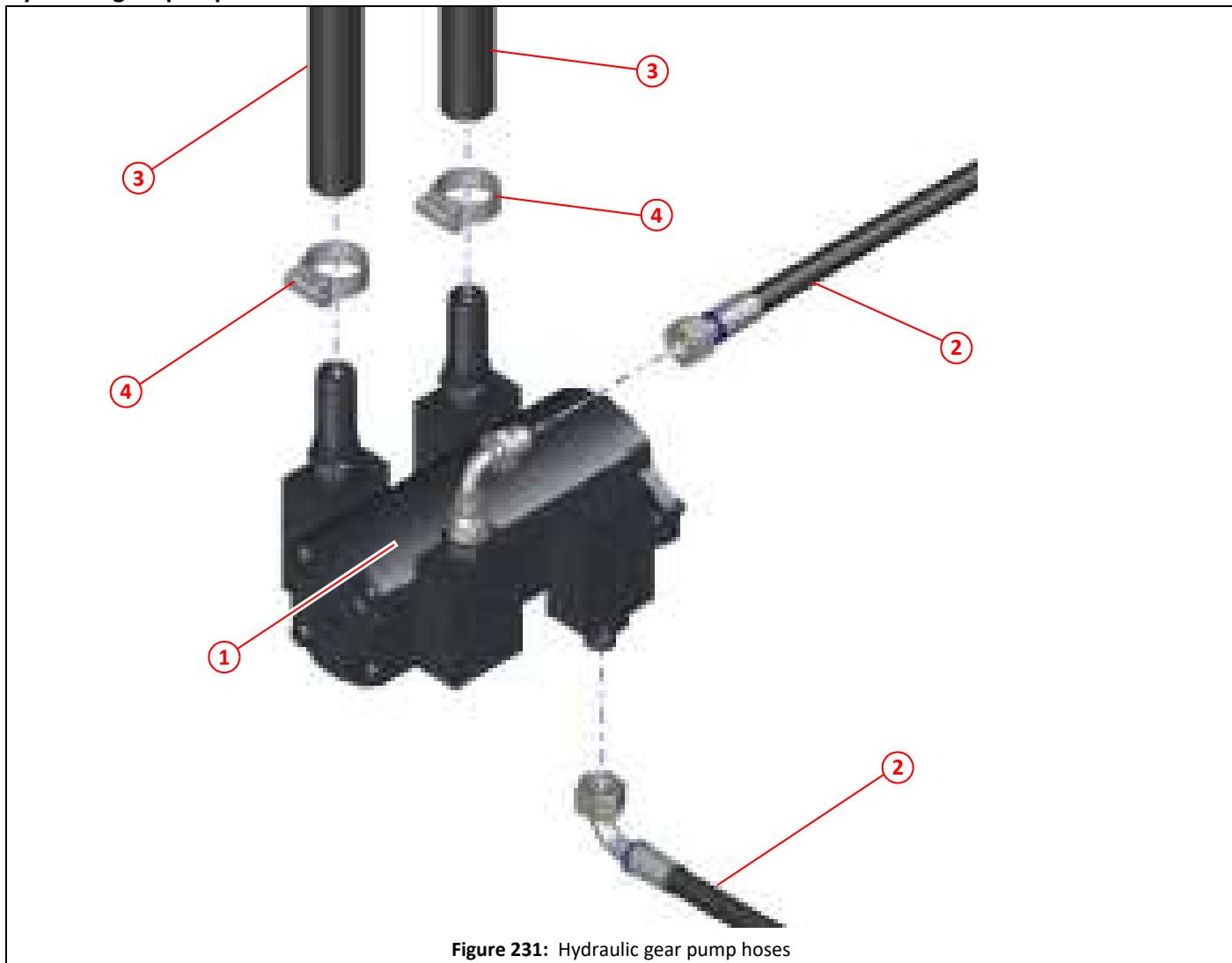


Figure 230: Hydraulic fan pump hose fittings

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 026235  | 1   | Fan pump, A10VO60  |
| ②    | 000477  | 2   | Setscrew HT M14 x 2 x 30 10.9, black                                     |
| ③    | 011106  | 2   | Spring washer M14  |
| ④    | 002264  | 1   | 2" SAE O ring  |
| ⑤    | 002263  | 1   | Flange 2" SAE split kit 3000 PSI   |
| ⑥    | 002298  | 1   | Elbow, swept, 2" SAE TO 2" hose  |
| ⑦    | 011108  | 4   | Socket cap head screw, $\frac{1}{2}$ " UNC x $1\frac{1}{2}$ "            |
| ⑧    | 011226  | 1   | Adapter $\frac{7}{8}$ " SAE x $\frac{1}{2}$ " BSP, complete with O ring  |
| ⑨    | 011176  | 1   | Sweep elbow $\frac{1}{2}$ " BSP  |
| ⑩    | 011227  | 1   | Adapter $\frac{7}{16}$ " SAE x $\frac{1}{4}$ " BSP, complete with O ring |
| ⑪    | 013517  | 1   | O ring, 1" SAE, BS 219 NITRILE 90 SHORE                                  |
| ⑫    | 014105  | 1   | Flange 1" SAE 1" BSP   |
| ⑬    | 011156  | 1   | Dowty seal 1" BSP  |
| ⑭    | 011406  | 4   | Spring washer $\frac{3}{8}$ "  |
| ⑮    | 000045  | 4   | Socket cap head screw $\frac{3}{8}$ " UNC x $1\frac{1}{2}$ "             |
| ⑯    | 011193  | 1   | Adapter 1" x $\frac{3}{4}$ " BSP   |
| ⑰    | 002233  | 1   | Tee $\frac{3}{4}$ " BSP, male/female/female, nut on branch               |
| ⑱    | 011166  | 1   | Adapter $\frac{3}{4}$ " x $\frac{1}{2}$ " BSP                            |

**Hydraulic gear pump hoses**

**Figure 231: Hydraulic gear pump hoses**

| Item | Part No | Qty | Description  | File |
|------|---------|-----|--|------|
| ①    | 031970  | 1   | Gear pump 23cc double  |      |
| ②    | 001165  | 2   | Hose $\frac{1}{2}''$ x 670, straight and 90° ends                        |      |
| ③    | 014827  | 2   | Hose $\varnothing 1''$ , cut to required length(s)                       |      |
| ④    | 014828  | 2   | Jubilee clip, high torque, size 40 [ $\varnothing 30-\varnothing 40mm$ ] |      |

## Hydraulic gear pump hose fittings

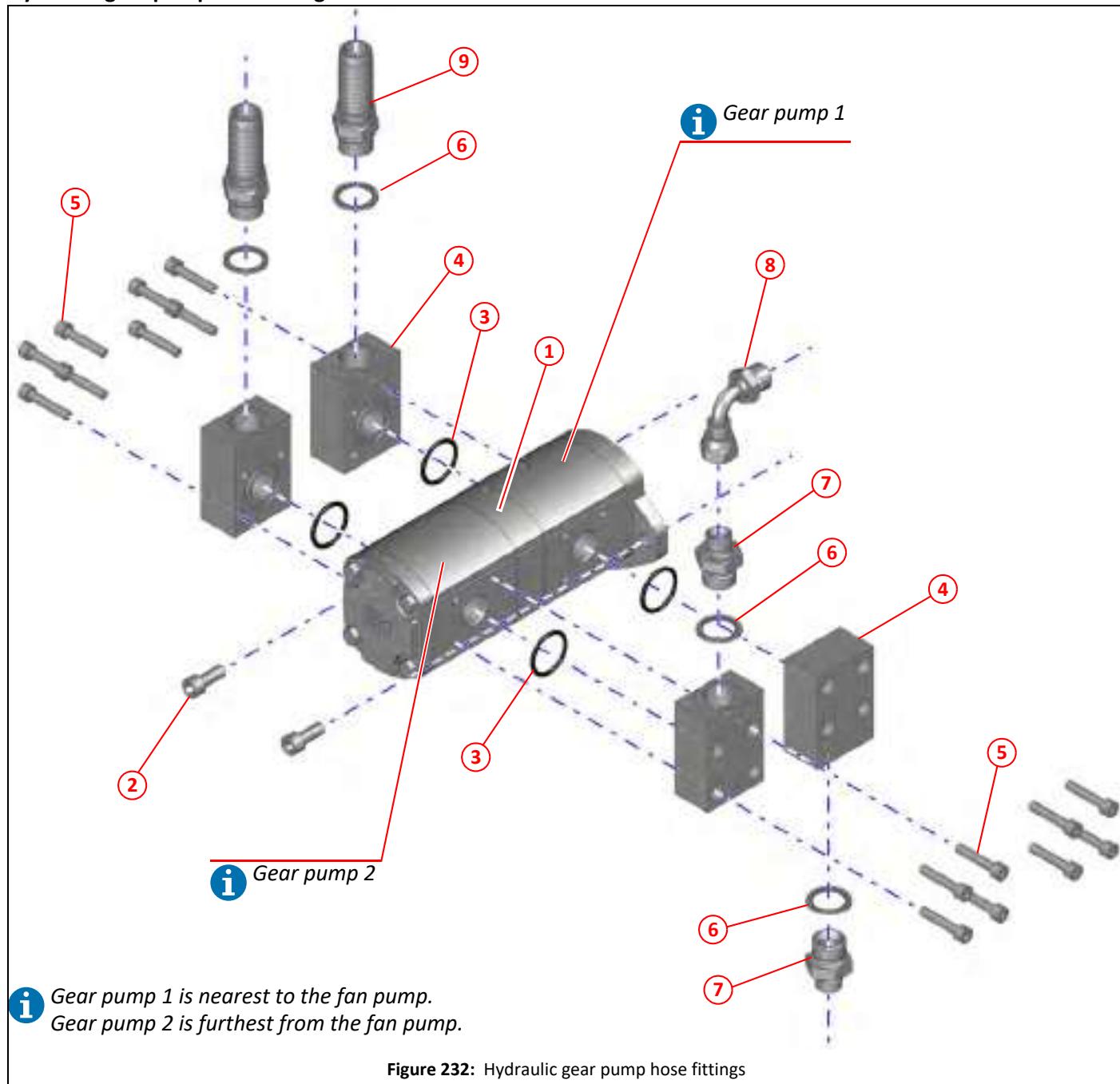
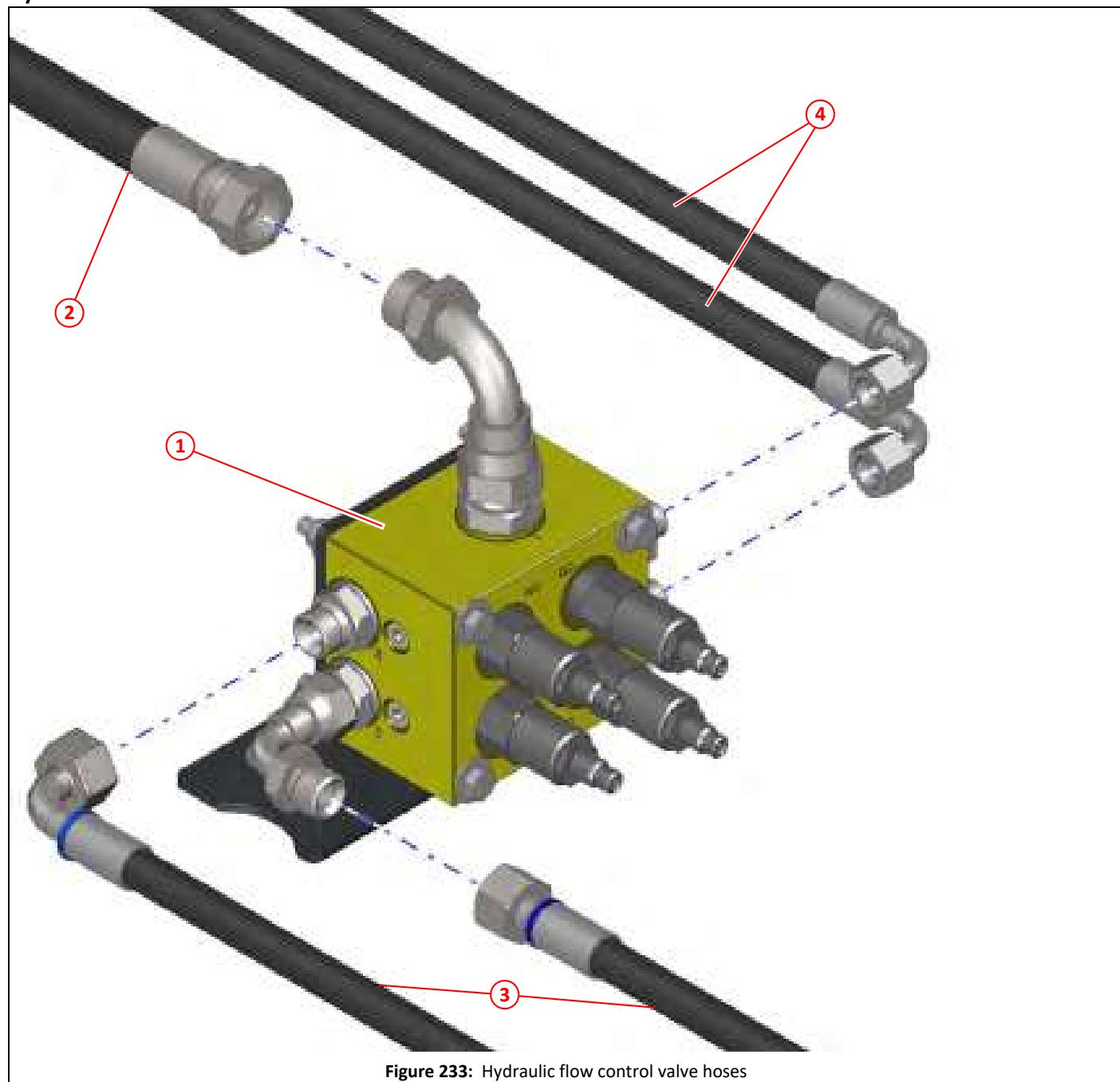


Figure 232: Hydraulic gear pump hose fittings

| Item | Part No  | Qty | Description                            |
|------|----------|-----|--|
| ①    | 031970 * | 1   | Gear pump 23cc double                  |
| ②    | 011028   | 2   | Socket cap head screw M10 x 25         |
| ③    | 013517   | 4   | O ring, 1 SAE, BS 219 NITRILE 90 SHORE |
| ④    | 026335   | 4   | Adapter block, gear pump               |
| ⑤    | 000096   | 16  | Socket cap head screw M8 x 40          |
| ⑥    | 011155   | 4   | Dowty seal 3/4" BSP                    |
| ⑦    | 011166   | 2   | Adapter 3/4" x 1/2" BSP                |
| ⑧    | 011176   | 1   | Elbow, sweep, 1/2" BSP                 |
| ⑨    | 002252   | 2   | Hosetail 3/4" BSP male x 1" hose       |

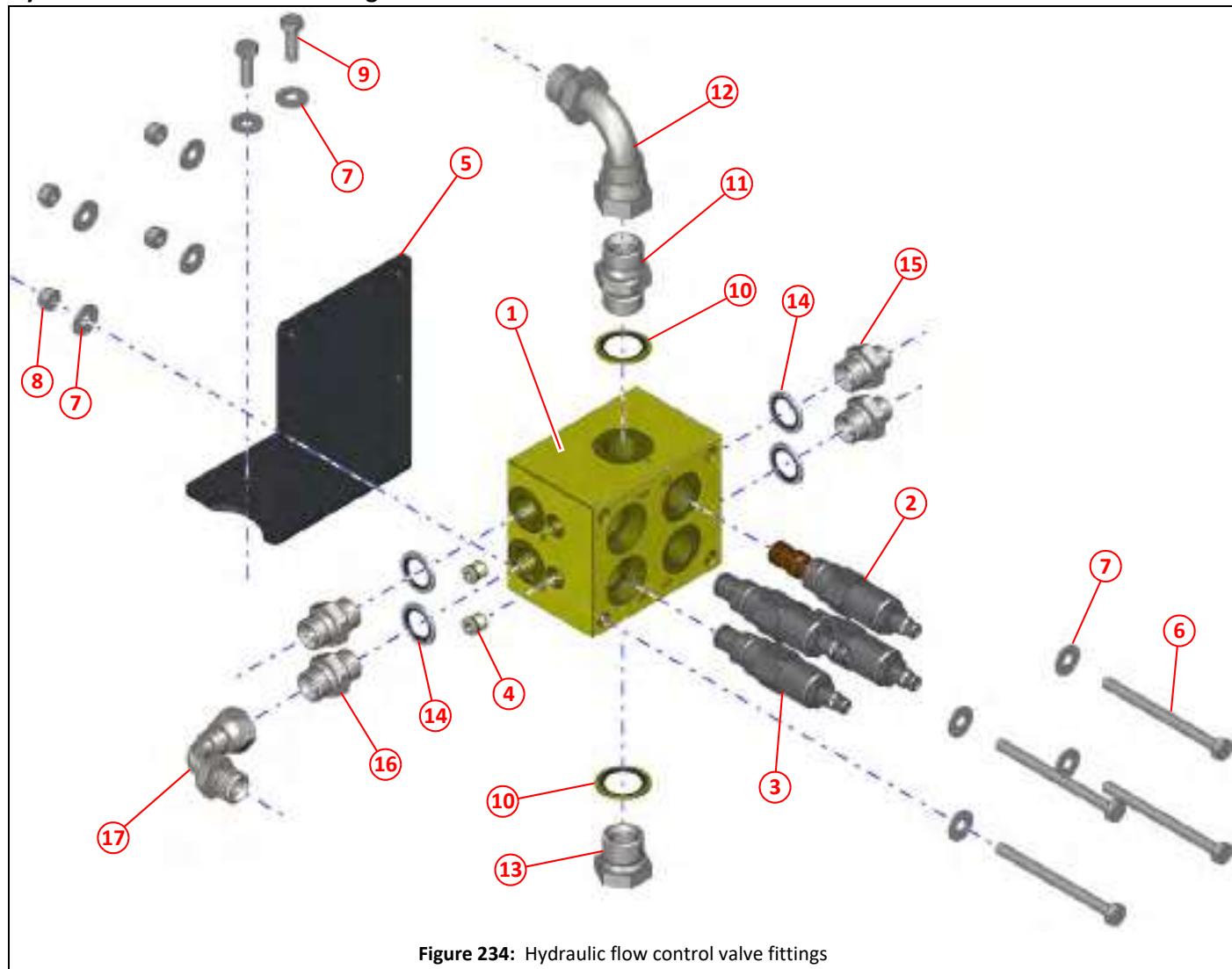
|      |        |   |                                 |
|------|--------|---|---------------------------------|
| NI * | 030629 | 1 | Seal kit, gear pump 23cc double |
| *    | 031971 | 1 | Gear pump 23cc single           |
| NI * | 030628 | 1 | Seal kit, gear pump 23cc single |

## Hydraulic flow control valve hoses

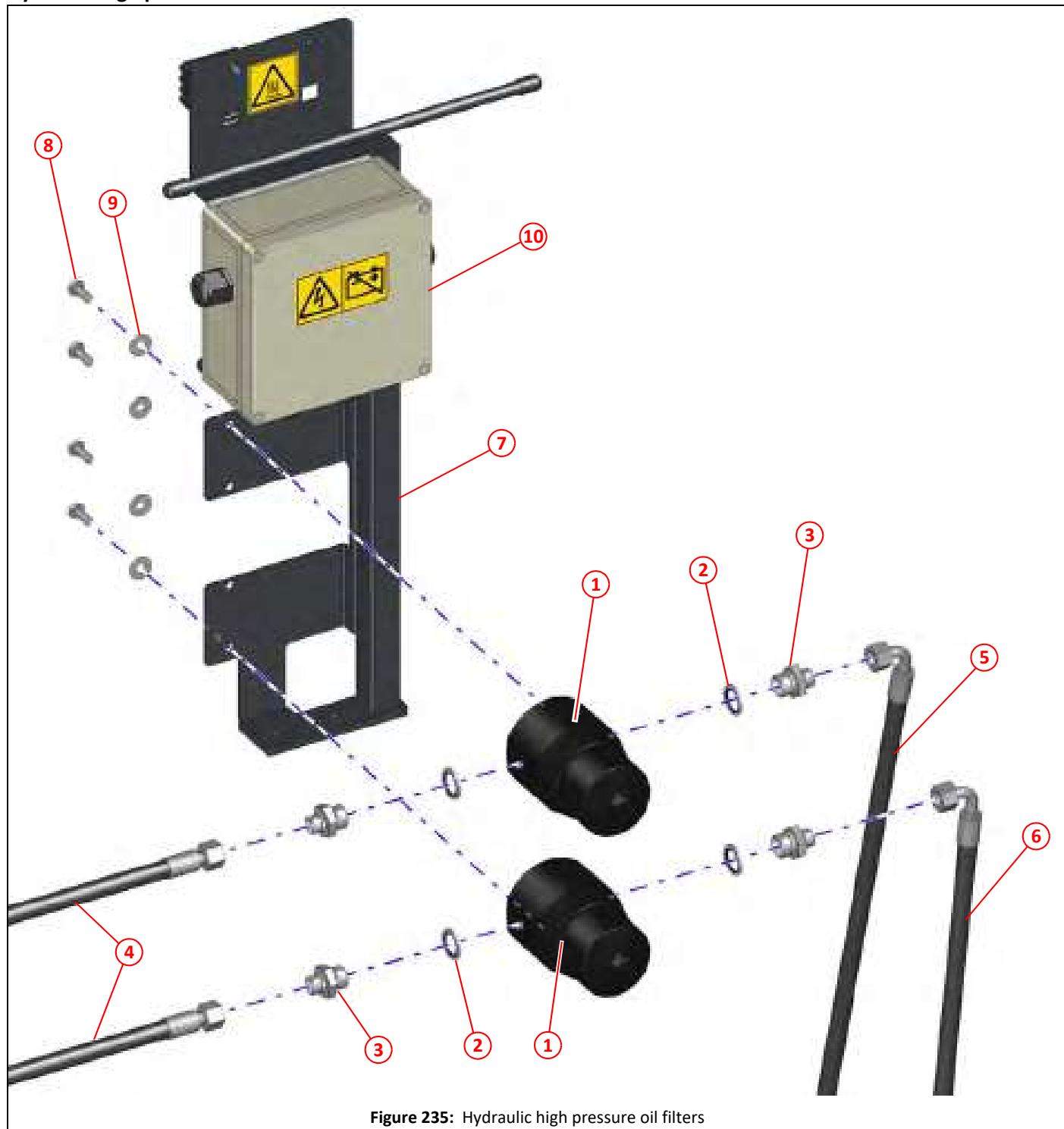


| Item | Part No | Qty | Description   |         |
|------|---------|-----|---|---------|
| ①    | 038513  | 1   | Flow control, remote mounted, assembly                                      | 270,372 |
| ②    | 001073  | 1   | Hose $\frac{5}{8}''$ x 1600, with $\frac{3}{4}''$ BSP straight and 90° ends |         |
| ③    | 001165  | 2   | Hose $\frac{1}{2}''$ x 670, straight and 90° ends                           |         |
| ④    | 001360  | 2   | Hose $\frac{3}{8}''$ x 940, straight and 90° ends                           |         |

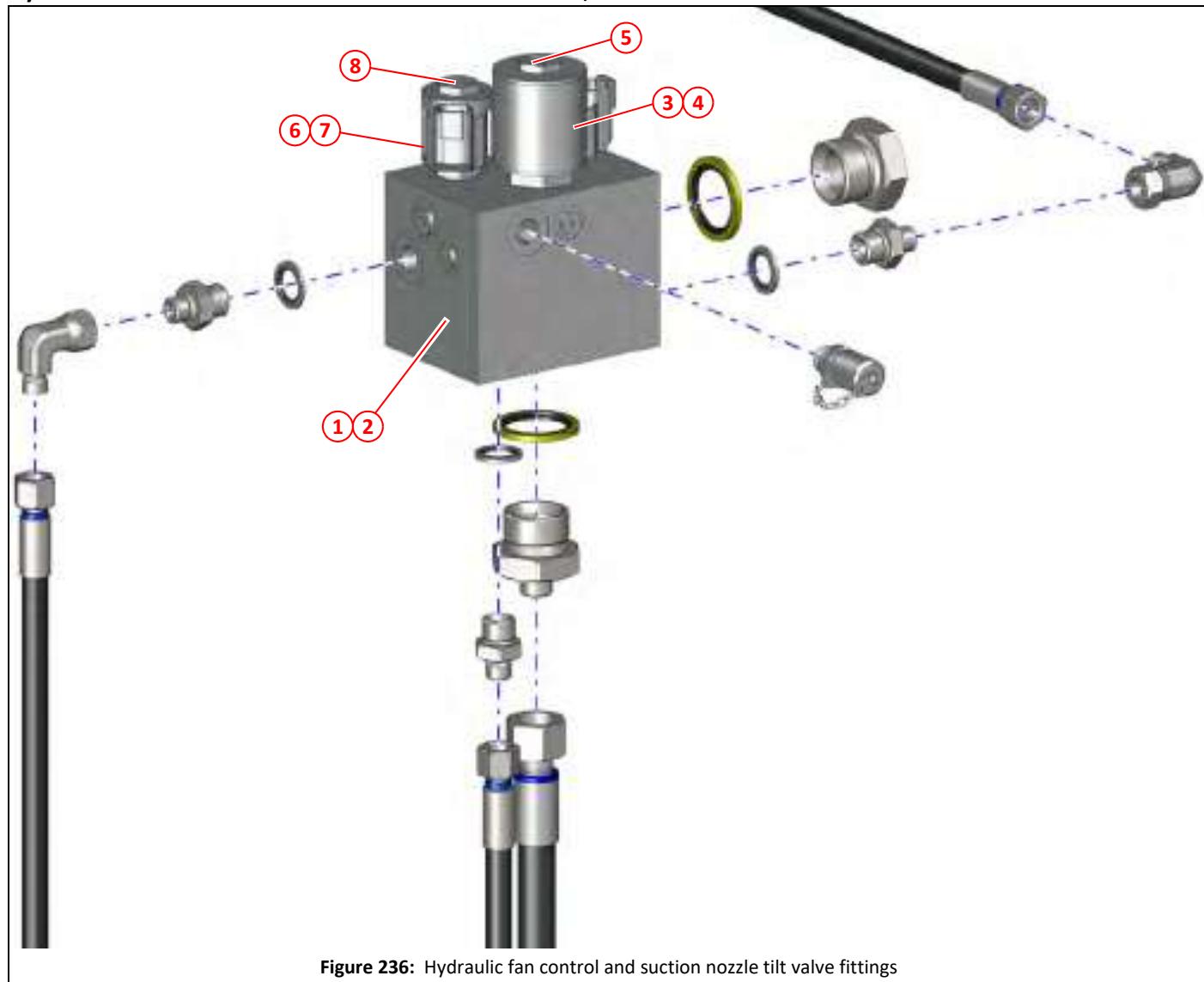
## Hydraulic flow control valve fittings



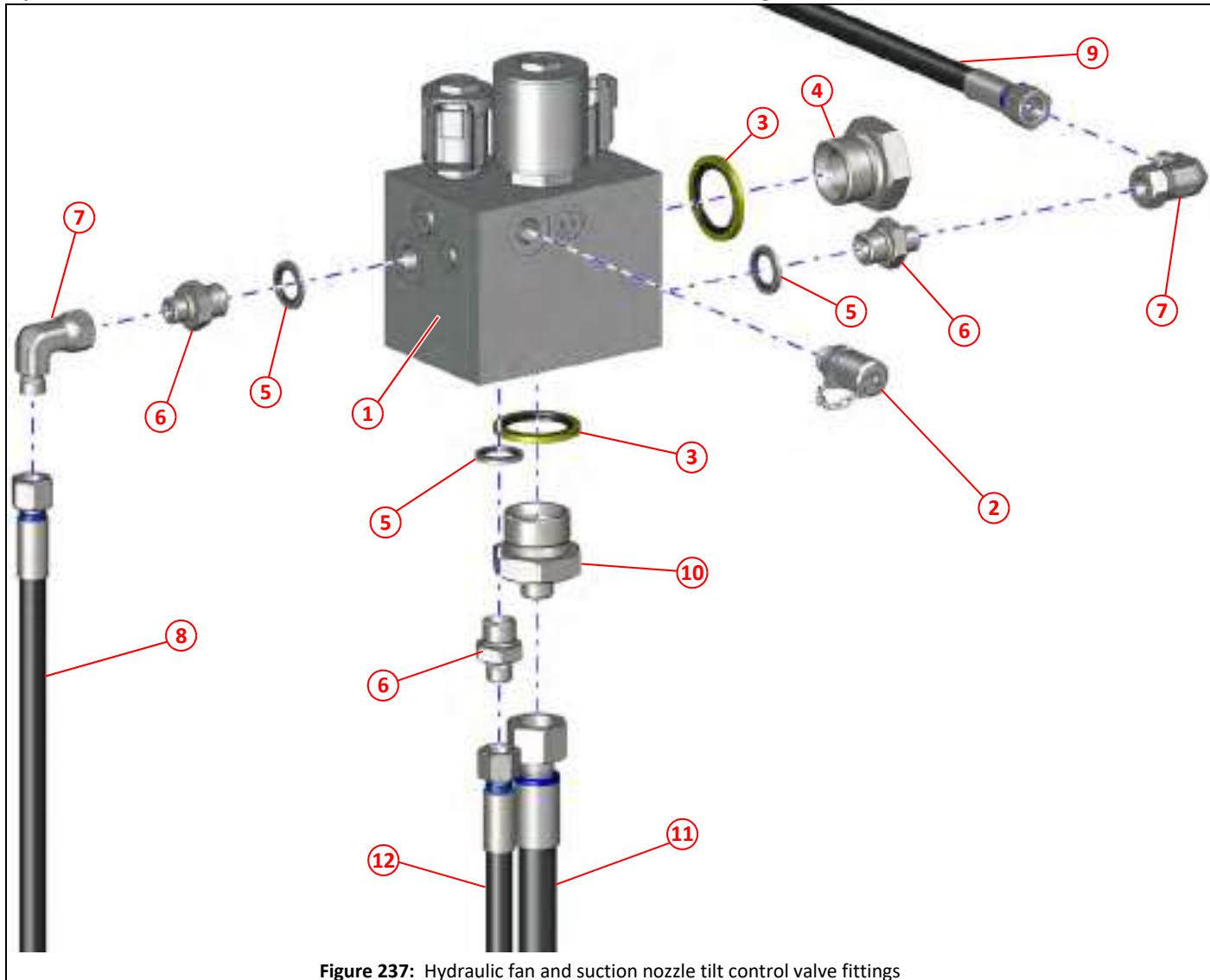
| Item | Part No | Qty | Description   |         |
|------|---------|-----|---|---------|
| ①    | 038513  | 1   | Flow control, remote mounted, assembly, includes items ②, ③ and ④ | 269,372 |
| ②    | 040288  | 2   | Flow regulator (PFR2-10-S-0-9.00)                                 |         |
| ③    | 039063  | 2   | Relief valve (RV5-10-S-0-35/30)                                   |         |
| ④    | 039061  | 2   | Hex plug, hollow, $\frac{1}{4}$ " SAE                             |         |
| ⑤    | 046973  | 1   | Bracket, flow control, remote mounted                             |         |
| ⑥    | 011020  | 4   | Bolt, M8 x 80   |         |
| ⑦    | 011092  | 10  | Washer M8   |         |
| ⑧    | 011073  | 4   | Nyloc nut T M8  |         |
| ⑨    | 011011  | 2   | Setscrew M8 x 25  |         |
| ⑩    | 011155  | 2   | Dowty seal $\frac{3}{4}$ " BSP                                    |         |
| ⑪    | 011161  | 1   | Adapter, male/male, $\frac{3}{4}$ " BSP                           |         |
| ⑫    | 011196  | 1   | Elbow, swept 90°, male/female, $\frac{3}{4}$ " BSP                |         |
| ⑬    | 011244  | 1   | Plug $\frac{3}{4}$ " BSP  |         |
| ⑭    | 011154  | 4   | Dowty seal $\frac{3}{4}$ " BSP                                    |         |
| ⑮    | 011167  | 2   | Adapter $\frac{1}{2}$ " x $\frac{3}{8}$ " BSP                     |         |
| ⑯    | 011160  | 2   | Adapter $\frac{1}{2}$ " BSP, male/male                            |         |
| ⑰    | 011176  | 1   | Elbow, sweep, $\frac{1}{2}$ " BSP                                 |         |

**Hydraulic high pressure oil filters**

**Figure 235:** Hydraulic high pressure oil filters

| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    | 025103  | 2   | Filter high pressure   |     |
| ②    | 011154  | 4   | Dowty seal $\frac{3}{4}$ " BSP   |     |
| ③    | 011167  | 4   | Adapter $\frac{1}{2}$ " x $\frac{3}{8}$ " BSP  |     |
| ④    | 001360  | 2   | Hose $\frac{3}{8}$ " x 940, straight and 90° ends                                    |     |
| ⑤    | 001162  | 1   | Hose $\frac{3}{8}$ " x 1150, straight and 90° ends, to Port P on Options valve block |     |
| ⑥    | 001164  | 1   | Hose $\frac{3}{8}$ " x 1400, straight and 90° ends, to Port P on Main valve block    | 278 |
| ⑦    | 042957  | 1   | Junction box, mount  |     |
| ⑧    | 011010  | 4   | Setscrew M8 x 20   |     |
| ⑨    | 011092  | 4   | Washer M8  |     |
| ⑩    | 043350  | 1   | Battery junction box for DEUTZ   |     |

**Hydraulic fan and suction nozzle tilt control valve block, coils and solenoids**

**Figure 236: Hydraulic fan control and suction nozzle tilt valve fittings**

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 048012  | 1   | Manifold, fan drive, nozzle tilt 12V, includes items ③, ⑤ and ⑥ |
| ②    | 047751  | 1   | Manifold, fan drive, nozzle tilt 24V, includes items ④, ⑤ and ⑦ |
| ③    | 041224  | 1   | Coil, 4304112 E SERIES, 12V                                     |
| ④    | 044048  | 1   | Coil, 4304124 E SERIES, 24V                                     |
| ⑤    | 044499  | 1   | Solenoid SV58-30-0-P-00   |
| ⑥    | 041225  | 1   | Coil, 4304012 E SERIES, 12V                                     |
| ⑦    | 044049  | 1   | Coil, 4304024 E SERIES, 24V                                     |
| ⑧    | 048478  |     | Solenoid SF08-22-0-P-00   |

**Hydraulic fan and suction nozzle tilt control valve block, hoses and fittings**

**Figure 237: Hydraulic fan and suction nozzle tilt control valve fittings**

| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    |         | 1   | Manifold, fan drive, nozzle tilt                                     | 272 |
| ②    | 013036  | 1   | Test point, $\frac{1}{4}$ " BSP                                      |     |
| ③    | 011156  | 2   | Dowty seal 1" BSP  |     |
| ④    | 011136  | 1   | Plug 1" BSP  |     |
| ⑤    | 011153  | 3   | Dowty seal $\frac{3}{8}$ " BSP                                       |     |
| ⑥    | 011199  | 3   | Adapter $\frac{3}{8}$ " x $\frac{1}{4}$ " BSP                        |     |
| ⑦    | 011171  | 2   | Elbow, swivel $\frac{1}{4}$ " BSP, male/female                       |     |
| ⑧    | 001287  | 1   | Hose $\frac{1}{4}$ " x 715, straight and 90° ends                    |     |
| ⑨    | 001104  | 1   | Hose $\frac{1}{4}$ " x 1020, straight and 90° ends                   |     |
| ⑩    | 002294  | 1   | Adapter 1" BSP x $\frac{3}{8}$ " BSP male/male                       |     |
| ⑪    | 001076  | 1   | Hose $\frac{1}{2}$ " x 600, straight and 90° ends                    |     |
| ⑫    | 001367  | 1   | Hose $\frac{1}{4}$ " x 2220, straight end and 90° stand pipe 6mm end |     |

## Main and option valve blocks in hydraulic cabinet

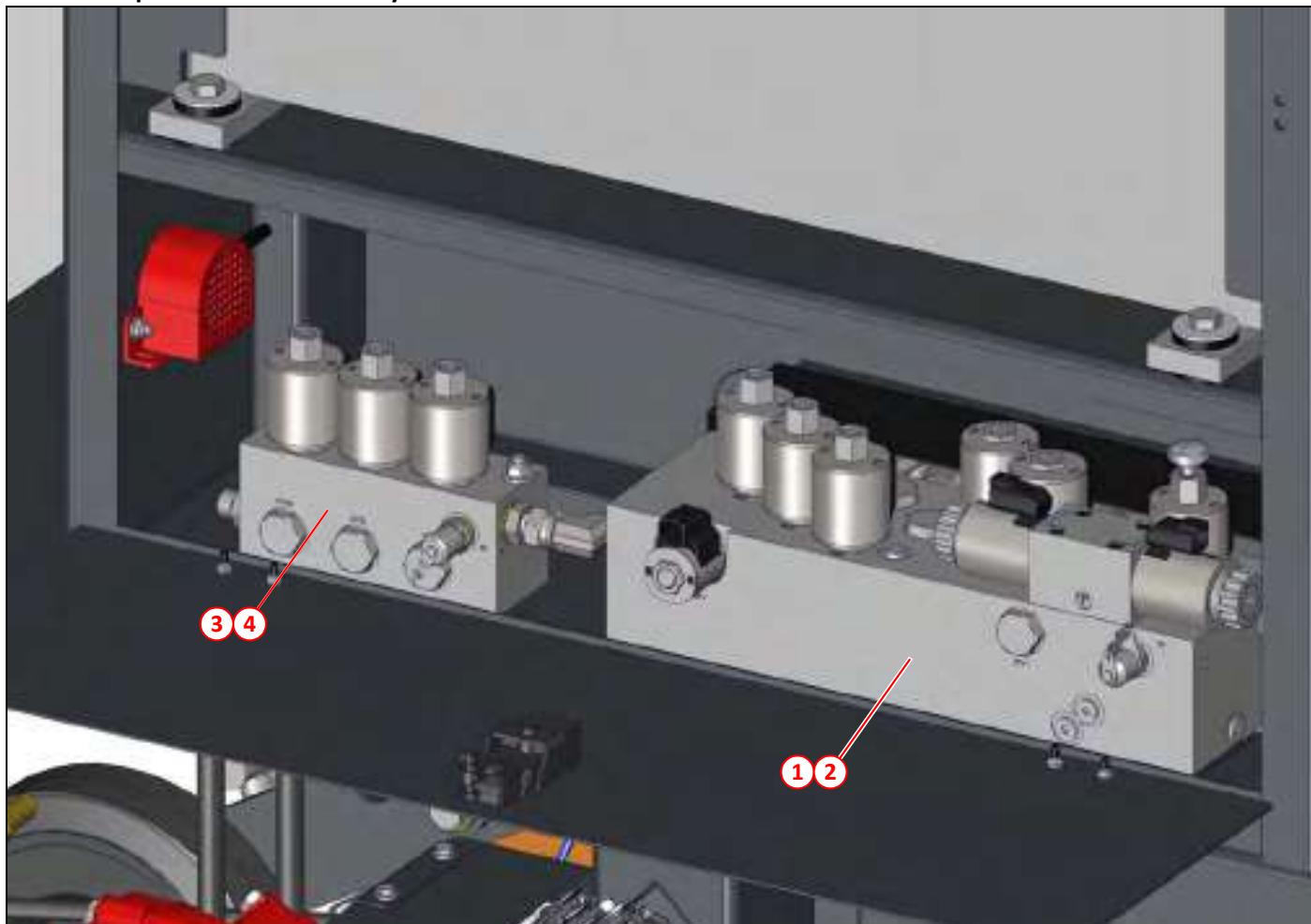
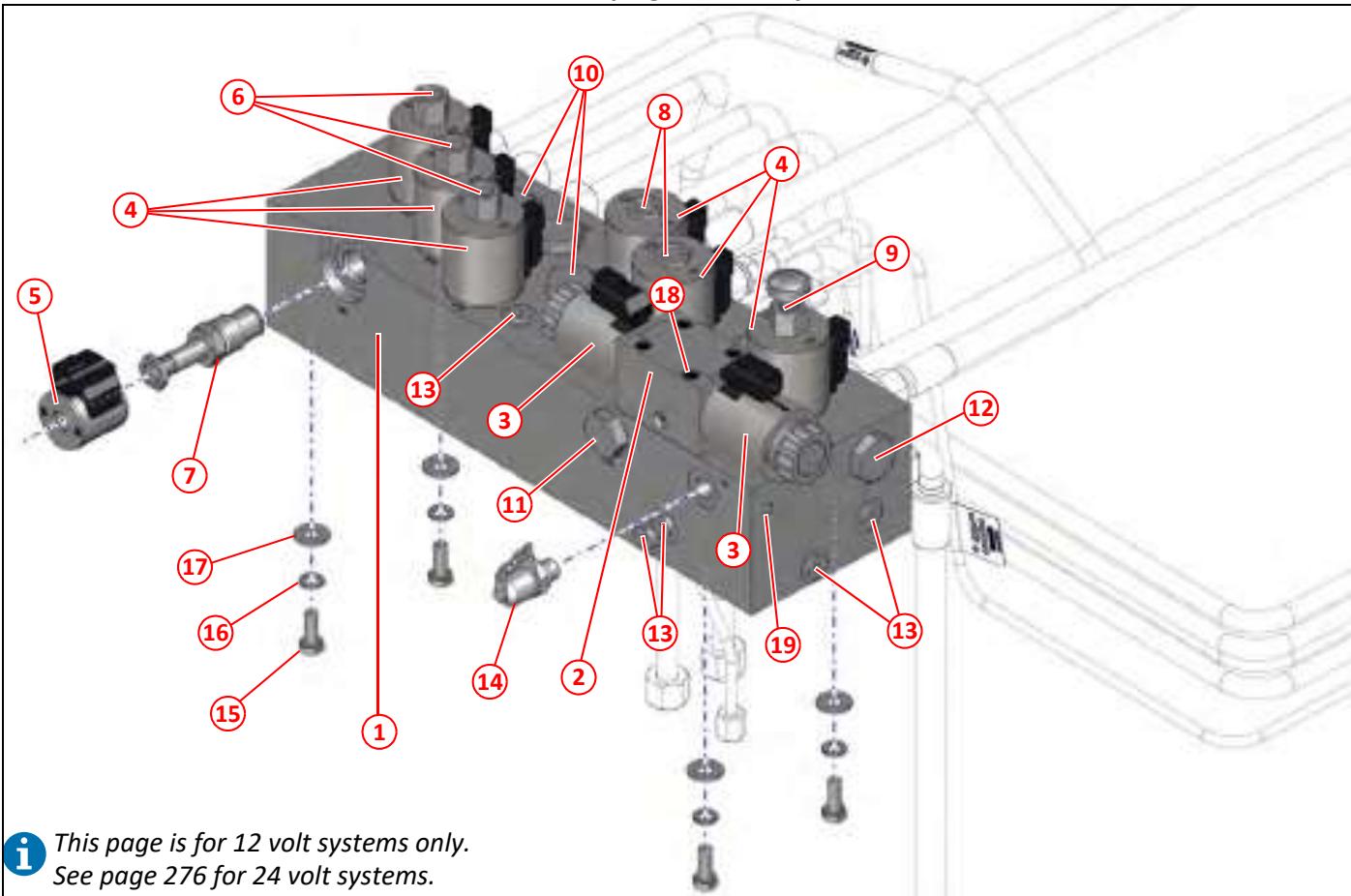


Figure 238: Main and option valve block in hydraulic cabinet

| Item | Part No | Qty | Description                                 |
|------|---------|-----|---|
| ①    | 044485  | 1   | Main valve block assembly, populated, 12V   |
| ②    | 043393  | 1   | Main valve block assembly, populated, 24V   |
| ③    | 044487  | 1   | Option valve block assembly, populated, 12V |
| ④    | 043394  | 1   | Option valve block assembly, populated, 24V |

## Main valve block, coils, solenoids, check valves and plugs - 12 volt systems



**i** This page is for 12 volt systems only.  
See page 276 for 24 volt systems.

Figure 239: Main valve block, coils, solenoids, check valves and plugs - 12 volt systems

| Item | Part No | Qty | Description                                       |
|------|---------|-----|---|
| ①    | 044045  | 1   | Main valve block, bare                            |
| ②    | 044046  | 1   | Directional control valve, SVD03-47C-N-00         |
| ③    | 044497  | 2   | Coil 12V, E Series, 4302692                       |
| ④    | 041224  | 6   | Coil 12V, E Series, 4304112                       |
| ⑤    | 041225  | 1   | Coil 12V, E Series, 4304012                       |
| ⑥    | 044053  | 3   | Solenoid valve, SV10-21-0-N-00                    |
| ⑦    | 044051  | 1   | Solenoid valve, SP08-20-0-N-00                    |
| ⑧    | 044052  | 2   | Solenoid valve, SV10-20-0-N-00                    |
| ⑨    | 044054  | 1   | Solenoid valve, manual override, SV10-21K-0-N-00  |
| ⑩    | 044055  | 3   | Cartridge check valve, CV10-20-0-N-100            |
| ⑪    | 045534  | 1   | Cartridge check valve, CV10-20-0-N-05             |
| ⑫    | 044056  | 1   | Cavity plug, CP10-20-N                            |
| ⑬    | 044058  | 15  | SAE plug, 6103004                                 |
| ⑭    | 013036  | 1   | Test point adapter                                |
| ⑮    | 011010  | 4   | Setscrew HT M8 x 20                               |
| ⑯    | 011093  | 4   | Spring washer M8                                  |
| ⑰    | 011092  | 4   | Washer M8   |
| ⑱    | 044050  | 4   | Cap head bolt, directional control valve, 4190021 |
| ⑲    | 044059  | 1   | Expander plug                                     |

**i** Please see 'Resistors for hydraulic coils, 12V' on page 347 for resistor usage on some of these coils.

## Main valve block, coils, solenoids, check valves and plugs - 24 volt systems

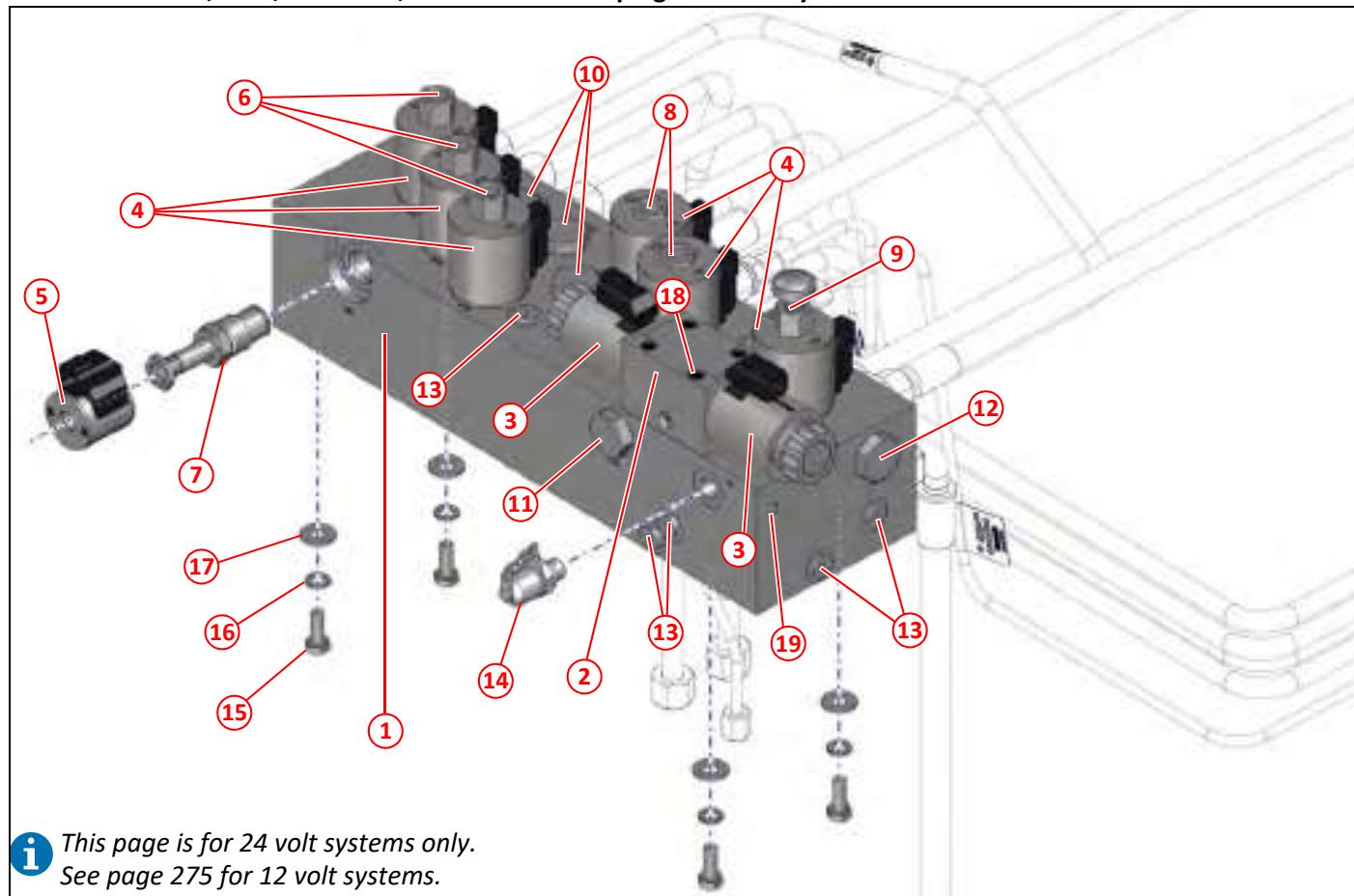


Figure 240: Main valve block, coils, solenoids, check valves and plugs - 24 volt systems

| Item | Part No | Qty | Description                                       |
|------|---------|-----|---|
| ①    | 044045  | 1   | Main valve block, bare                            |
| ②    | 044046  | 1   | Directional control valve, SVD03-47C-N-00         |
| ③    | 044047  | 2   | Coil 24V, E Series, 4302694                       |
| ④    | 044048  | 6   | Coil 24V, E Series, 4304124                       |
| ⑤    | 044049  | 1   | Coil 24V, E Series, 4304024                       |
| ⑥    | 044053  | 3   | Solenoid valve, SV10-21-0-N-00                    |
| ⑦    | 044051  | 1   | Solenoid valve, SP08-20-0-N-00                    |
| ⑧    | 044052  | 2   | Solenoid valve, SV10-20-0-N-00                    |
| ⑨    | 044054  | 1   | Solenoid valve, manual override, SV10-21K-0-N-00  |
| ⑩    | 044055  | 3   | Cartridge check valve, CV10-20-0-N-100            |
| ⑪    | 045534  | 1   | Cartridge check valve, CV10-20-0-N-05             |
| ⑫    | 044056  | 1   | Cavity plug, CP10-20-N                            |
| ⑬    | 044058  | 15  | SAE plug, 6103004                                 |
| ⑭    | 013036  | 1   | Test point adapter                                |
| ⑮    | 011010  | 4   | Setscrew HT M8 x 20                               |
| ⑯    | 011093  | 4   | Spring washer M8                                  |
| ⑰    | 011092  | 4   | Washer M8   |
| ⑱    | 044050  | 4   | Cap head bolt, directional control valve, 4190021 |
| ⑲    | 044059  | 1   | Expander plug                                     |

## Main valve block, fittings

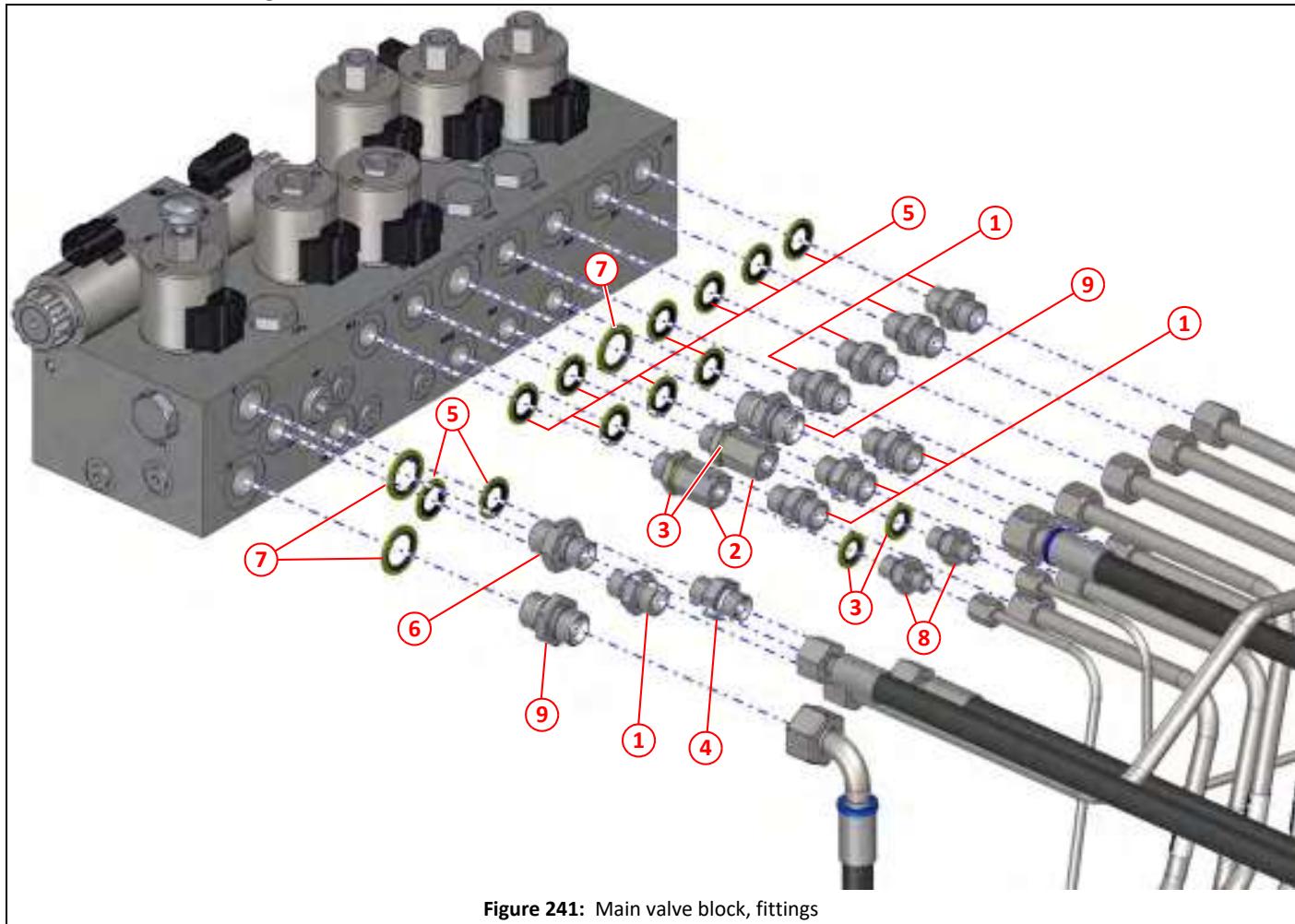
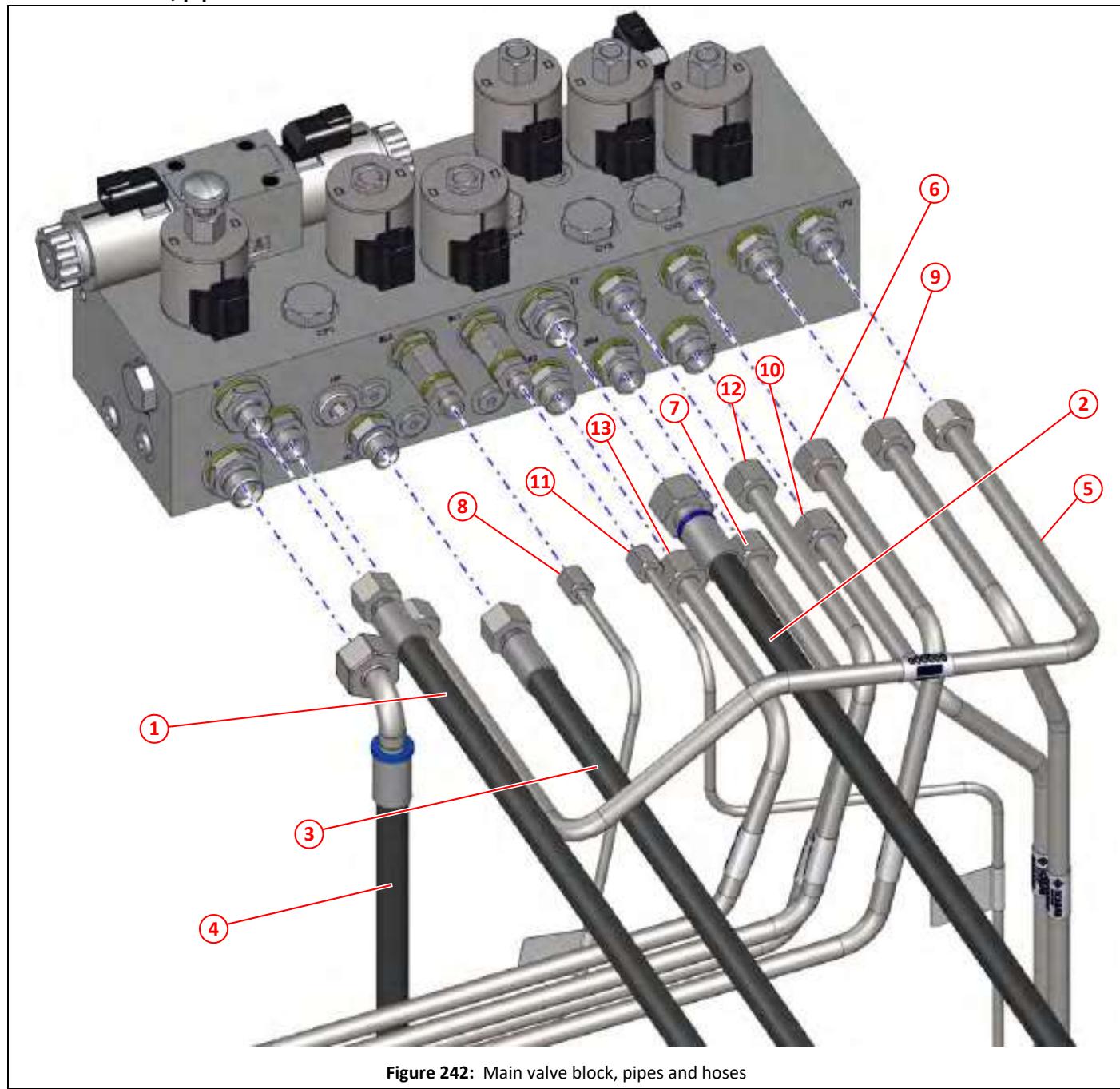


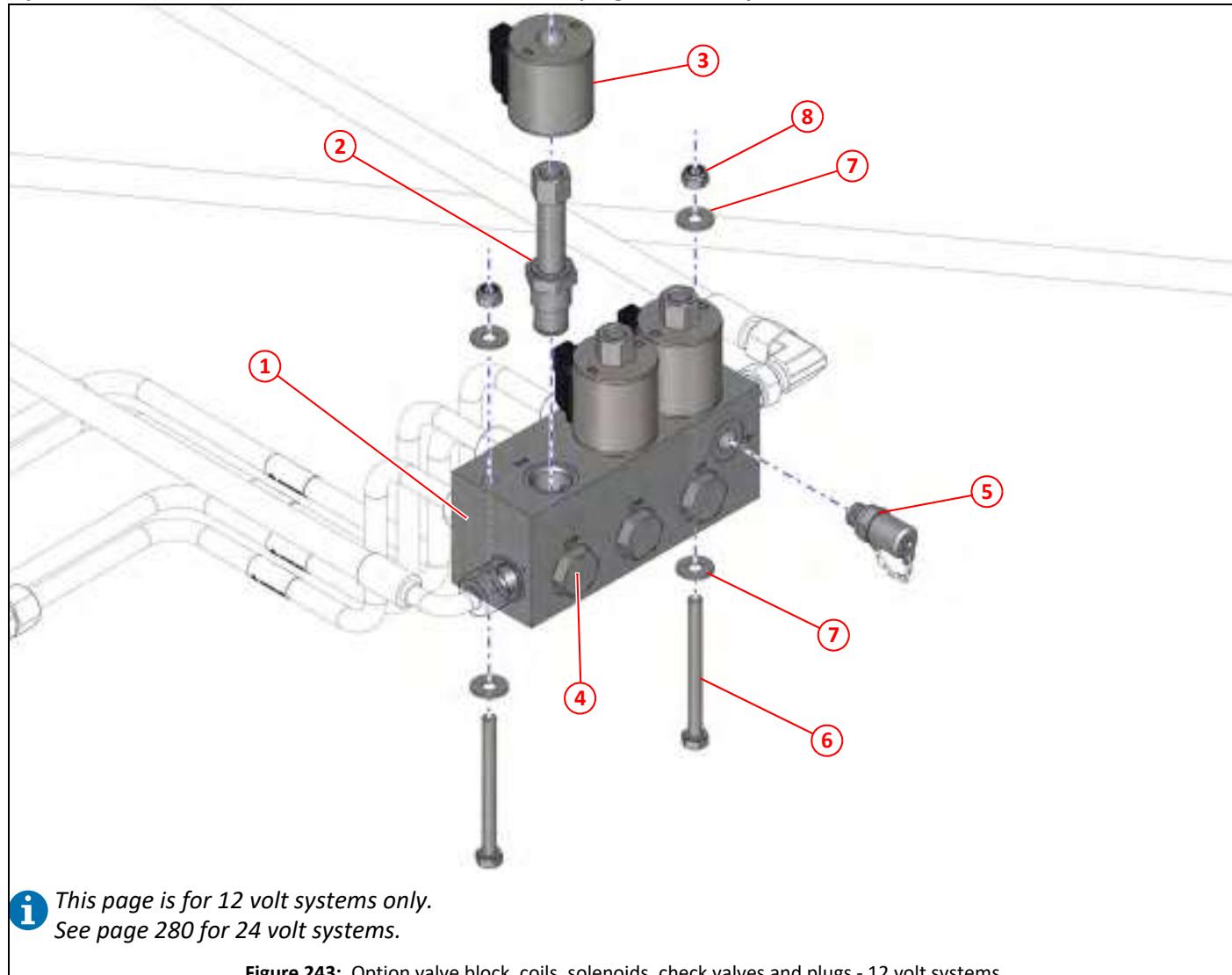
Figure 241: Main valve block, fittings

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 002175  | 8   | Male stud 12L to M16 x 1.5  |
| ②    | 002176  | 2   | Adapter, M/F, M16 x 1.5 to $\frac{1}{4}$ " BSP, 2 parts (adapter M/M and adapter F/F) |
| ③    | 011152  | 4   | Dowty seal $\frac{1}{4}$ " BSP  |
| ④    | 011186  | 1   | Adapter M16 x 1.5 to $\frac{3}{8}$ " BSP  |
| ⑤    | 011217  | 11  | Dowty seal M16  |
| ⑥    | 011266  | 1   | Adapter M20 x 1.5 to $\frac{3}{8}$ " BSP  |
| ⑦    | 011267  | 3   | Dowty seal M20  |
| ⑧    | 020902  | 2   | Male stud 6L x $\frac{1}{4}$ " BSP  |
| ⑨    | 037741  | 2   | Adapter $\frac{1}{2}$ " BSP male to M20 x 1.5 male                                    |

## Main valve block, pipes and hoses



| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| ①    | 001164  | 1   | Hose $\frac{3}{8}$ " x 1400, straight and 90° ends, from oil filter             | 271 |
| ②    | 001328  | 1   | Hose $\frac{1}{2}$ " x 810, straight/90°, to oil cooler                         | 414 |
| ③    | 011311  | 1   | Hose $\frac{3}{8}$ " x 1100, straight/90°, from hand pump/hopper control valves |     |
| ④    | 030992  | 1   | Hose $\frac{1}{2}$ " x 1100, straight/90°, to oil cooler                        | 414 |
| ⑤    | 040127  | 1   | Link pipe, steel, LP1/LP2   |     |
| ⑥    | 043405  | 1   | Pipe, steel, left hand brush feed, part 1                                       |     |
| ⑦    | 043407  | 1   | Pipe, steel, left hand brush return, part 1                                     |     |
| ⑧    | 043409  | 1   | Pipe, steel, left hand brush lift, part 1                                       |     |
| ⑨    | 043412  | 1   | Pipe, steel, right hand brush feed  |     |
| ⑩    | 043413  | 1   | Pipe, steel, right hand brush return  |     |
| ⑪    | 043414  | 1   | Pipe, steel, right hand brush lift  |     |
| ⑫    | 043416  | 1   | Pipe, steel, central (wide sweep) brush feed, part 1                            |     |
| ⑬    | 043418  | 1   | Pipe, steel, central (wide sweep) brush return, part 1                          |     |

**Option valve block, coils, solenoids, check valves and plugs - 12 volt systems**


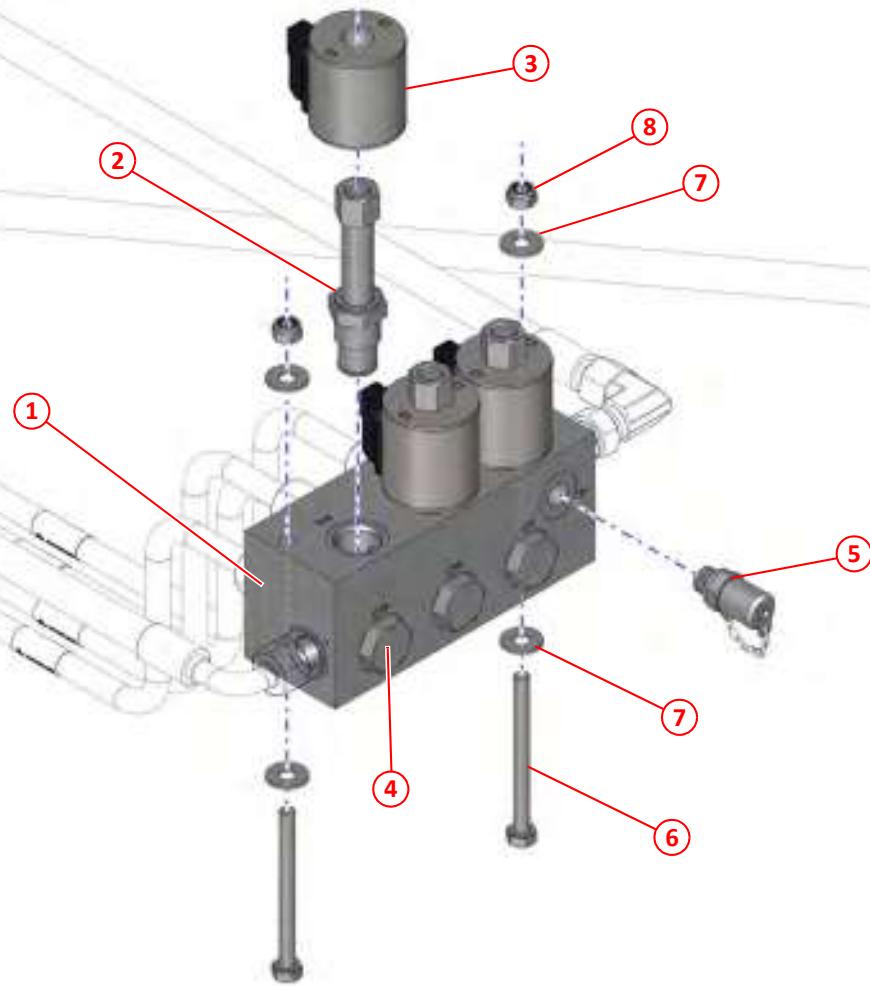
**i** This page is for 12 volt systems only.  
 See page 280 for 24 volt systems.

**Figure 243:** Option valve block, coils, solenoids, check valves and plugs - 12 volt systems

| Item | Part No | Qty | Description  |  |
|------|---------|-----|--|--|
| ①    | 044486  | 1   | Options valve block assembly, populated with ②, ③ and ④, 12V |  |
| ②    | 044053  | 3   | Solenoid valve, SV10-21-0-N-00                               |  |
| ③    | 041224  | 3   | Coil 12V, E Series, 4304112                                  |  |
| ④    | 044055  | 3   | Cartridge check valve, CV10-20-0-N-100                       |  |
| ⑤    | 013036  | 1   | Test point adapter   |  |
| ⑥    | 011019  | 2   | Bolt M8 x 90   |  |
| ⑦    | 011092  | 4   | Washer M8  |  |
| ⑧    | 011073  | 2   | Nyloc nut T M8   |  |

**i** Please see 'Resistors for hydraulic coils, 12V' on page 347 for resistor usage on some of these coils.

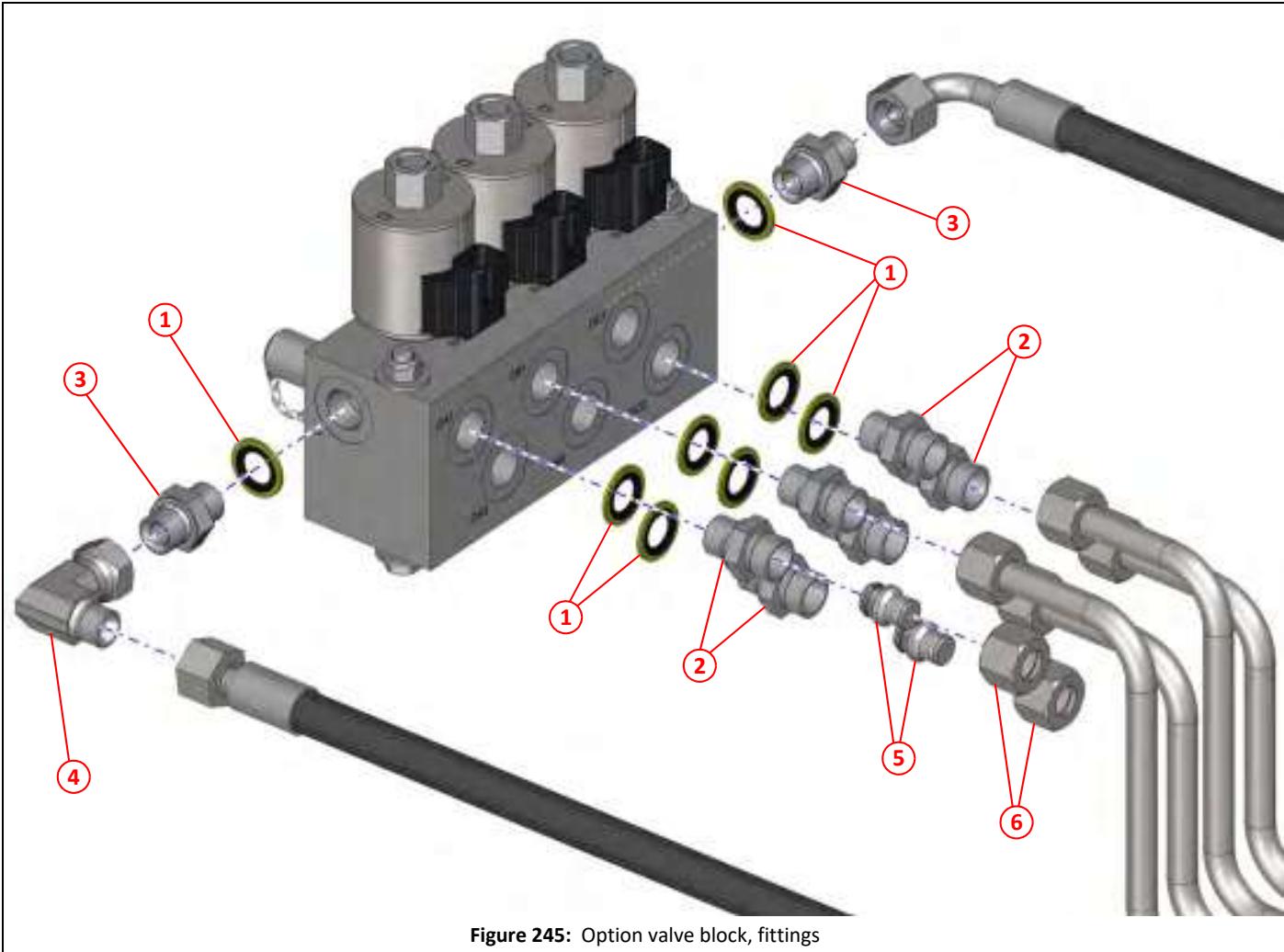
## Option valve block, coils, solenoids, check valves and plugs - 24 volt systems



**i** This page is for 24 volt systems only.  
See page 279 for 12 volt systems.

Figure 244: Option valve block, coils, solenoids, check valves and plugs - 24 volt systems

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 042616  | 1   | Options valve block assembly, populated with ②, ③ and ④, 24V |
| ②    | 044053  | 3   | Solenoid valve, SV10-21-0-N-00                               |
| ③    | 044048  | 3   | Coil 24V, E Series, 4304124                                  |
| ④    | 044055  | 3   | Cartridge check valve, CV10-20-0-N-100                       |
| ⑤    | 013036  | 1   | Test point adapter   |
| ⑥    | 011019  | 2   | Bolt M8 x 90   |
| ⑦    | 011092  | 4   | Washer M8  |
| ⑧    | 011073  | 2   | Nyloc nut T M8   |

**Option valve block, fittings**

**Figure 245:** Option valve block, fittings

| Item | Part No | Qty | Description                                     |
|------|---------|-----|---|
| ①    | 011217  | 8   | Dowty seal M16                                  |
| ②    | 002175  | 6   | Male stud M16 x 1.5 x 12                        |
| ③    | 011186  | 2   | Adapter M16 x 1.5 x $\frac{3}{8}$ " BSP         |
| ④    | 011172  | 1   | Elbow, swivel, $\frac{3}{8}$ " BSP, male/female |
| ⑤    | 002236  | 2   | Blanking plug 12mm                              |
| ⑥    | 002130  | 2   | Compression nut 12mm                            |

## Option valve block, pipes and hoses

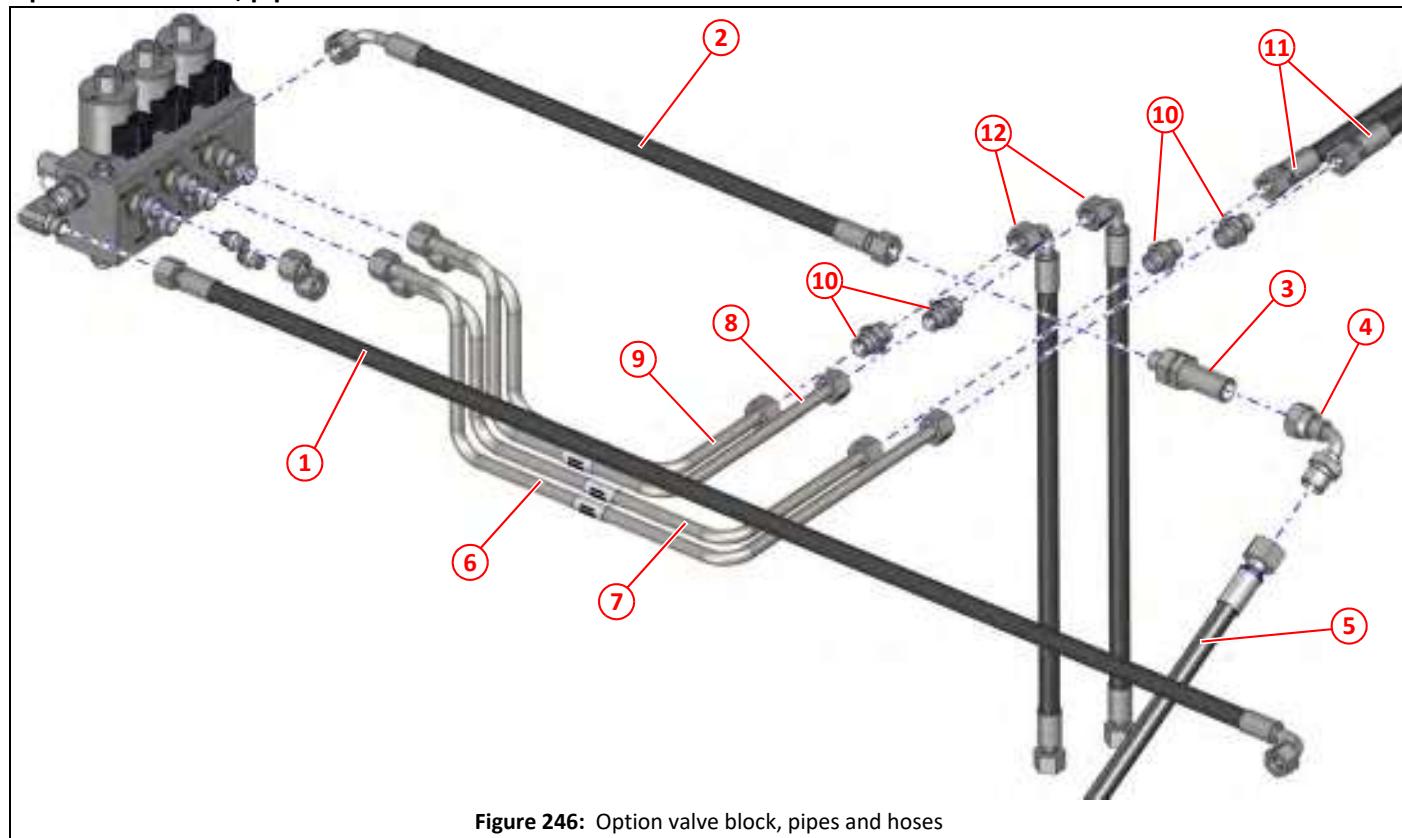
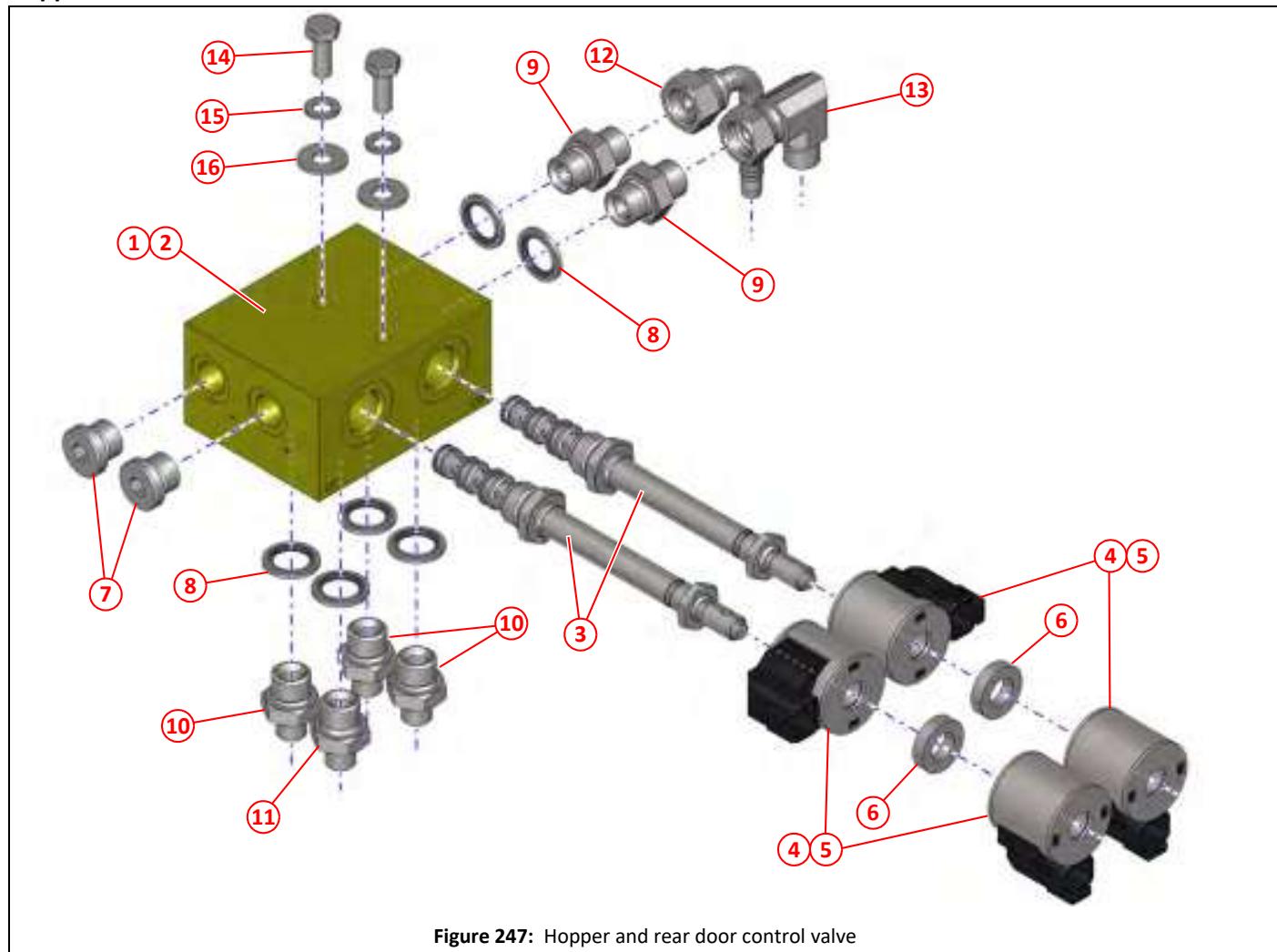


Figure 246: Option valve block, pipes and hoses

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 001162  | 1   | Hose $\frac{3}{8}''$ x 1150, straight and 90° ends, from HP oil filter to Port P     |
| ②    | 001226  | 1   | Hose $\frac{3}{8}''$ x 530, straight and 90° ends, from Port T to tank return        |
| ③    | 002255  | 1   | Bulkhead adapter, extended, $\frac{3}{8}''$ x $\frac{1}{2}''$ BSP, complete with nut |
| ④    | 011176  | 1   | Sweep elbow $\frac{1}{2}''$ BSP  |
| ⑤    | 001345  | 1   | Hose $\frac{1}{2}''$ x 2900, straight and 90° ends, to tank return                   |
| ⑥    | 043401  | 1   | Steel pipe, high pressure water pump, feed   |
| ⑦    | 043402  | 1   | Steel pipe, high pressure water pump, return   |
| ⑧    | 043399  | 1   | Steel pipe, low pressure water pump, feed  |
| ⑨    | 043400  | 1   | Steel pipe, low pressure water pump, return  |
| ⑩    | 020903  | 4   | Male stud 12 x $\frac{3}{8}''$ BSP   |
| ⑪    | 001149  | 2   | Hose $\frac{3}{8}''$ x 3550, straight and 90° ends, high pressure water pump         |
| ⑫    | 001294  | 2   | Hose $\frac{3}{8}''$ x 500, straight and 90° ends, low pressure water pump           |

**Hopper and subframe hydraulics**
**Hopper and rear door control valve**

**Figure 247: Hopper and rear door control valve**

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 044491  | 1   | Hopper control valve, 12V, includes items ③, ④ and ⑥                     |
| ②    | 039703  | 1   | Hopper control valve, 24V, includes items ③, ⑤ and ⑥                     |
| ③    | 039746  | 2   | Solenoid valve   |
| ④    | 041225  | 4   | Coil, 12V / 17.2 WATTS-ELZ   |
| ⑤    | 039747  | 4   | Coil, 24V with diode   |
| ⑥    | 039748  | 2   | Coil spacer  |
| ⑦    | 035242  | 2   | Port plug $\frac{3}{8}$ " BSP  |
| ⑧    | 011153  | 6   | Dowty seal $\frac{3}{8}$ " BSP   |
| ⑨    | 011159  | 2   | Adapter $\frac{3}{8}$ " BSP  |
| ⑩    | 011199  | 3   | Adapter $\frac{3}{8}$ " x $\frac{1}{4}$ " BSP                            |
| ⑪    | 040217  | 1   | Restrictor $\frac{1}{4}$ " x $\frac{3}{8}$ " BSP $\frac{3}{64}$ " ORANGE |
| ⑫    | 002048  | 1   | Elbow, swept, hosetail, $\frac{3}{8}$ " BSPF $\frac{3}{8}$ " hose        |
| ⑬    | 011172  | 1   | Elbow, swivel $\frac{3}{8}$ " BSP M/F                                    |
| ⑭    | 011010  | 2   | Setscrew HT M8 X 20  |
| ⑮    | 011093  | 2   | Spring washer M8   |
| ⑯    | 011092  | 2   | Washer M8  |

## Hopper and rear door control valve - hoses

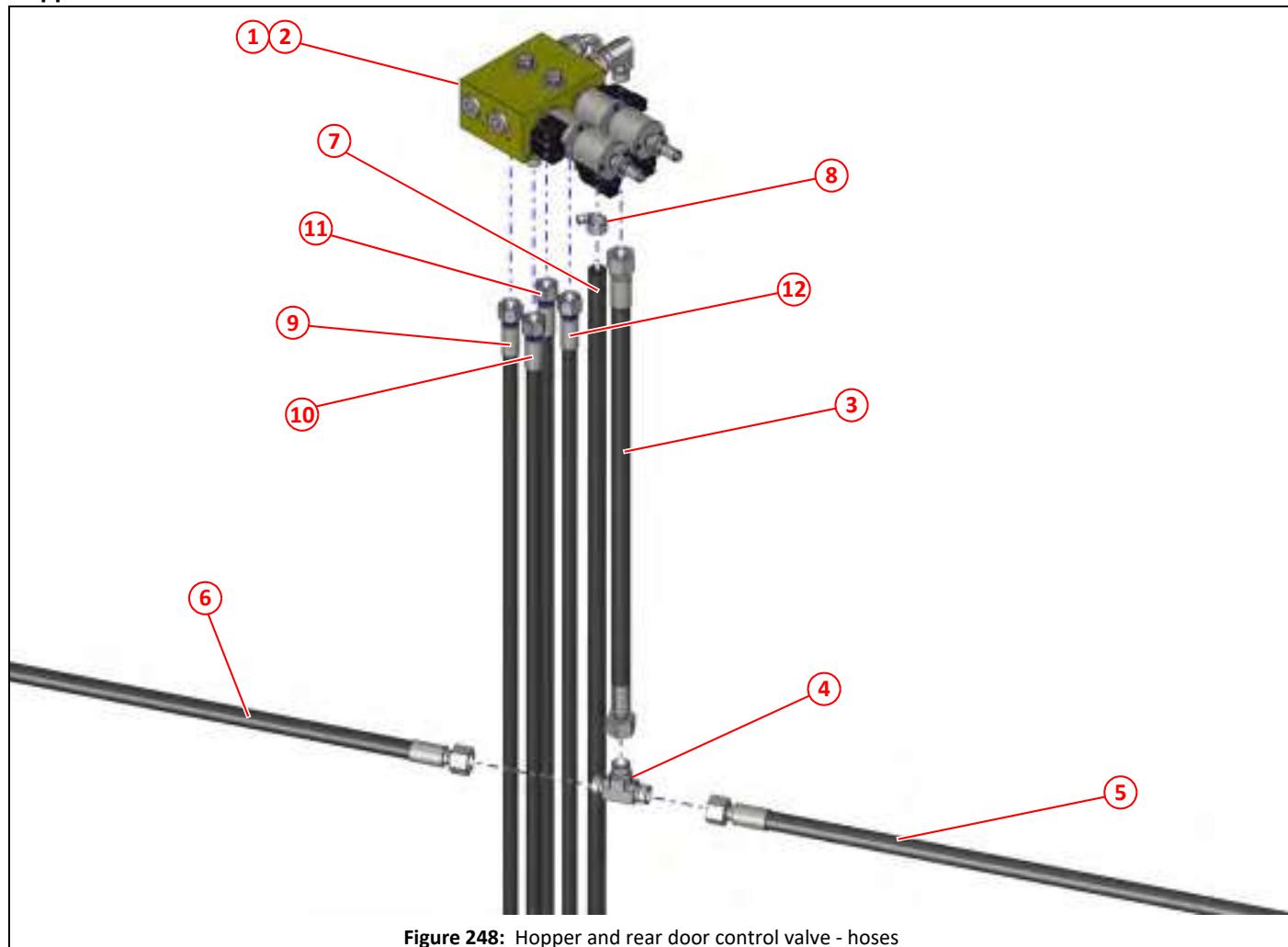
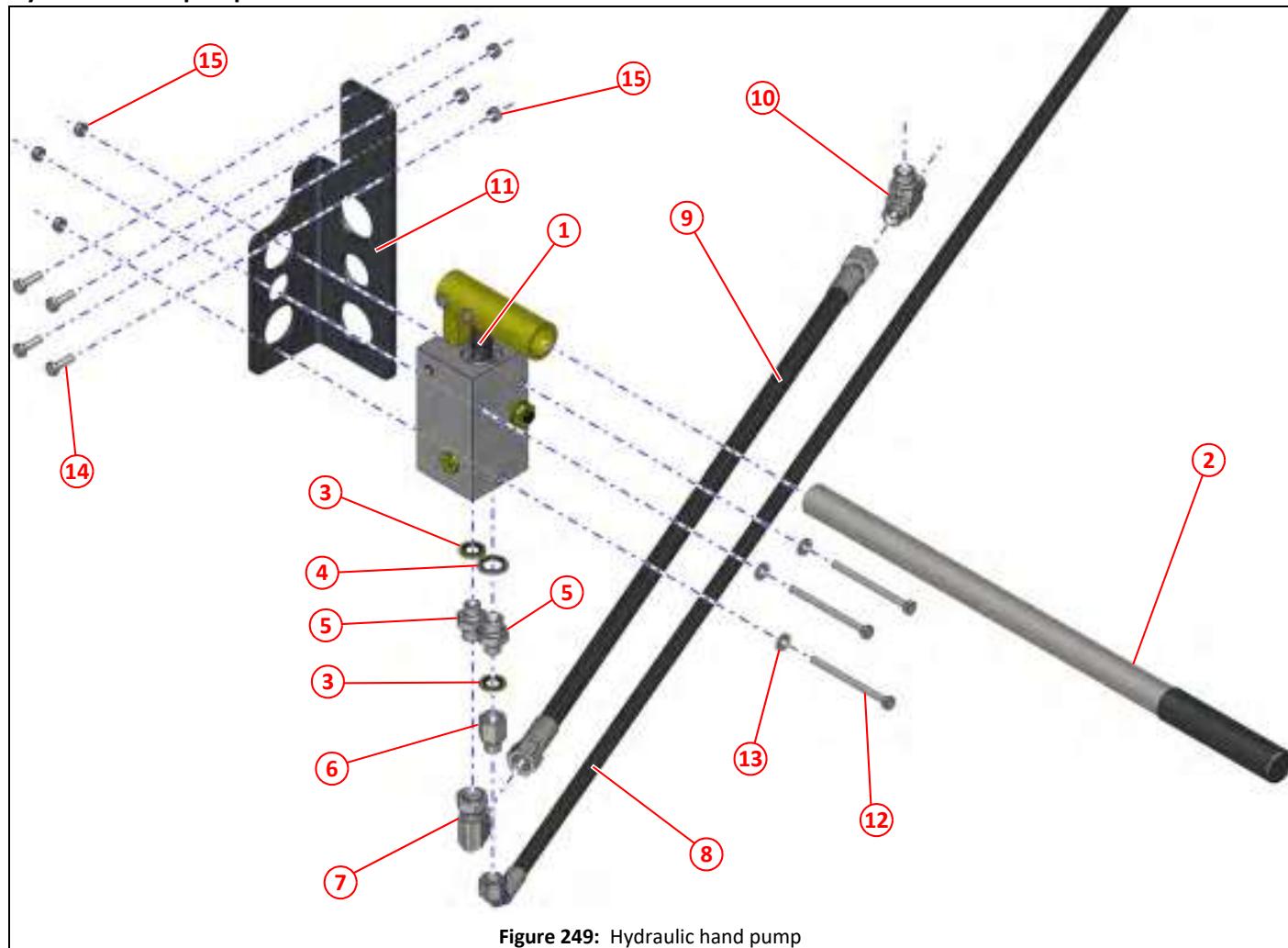


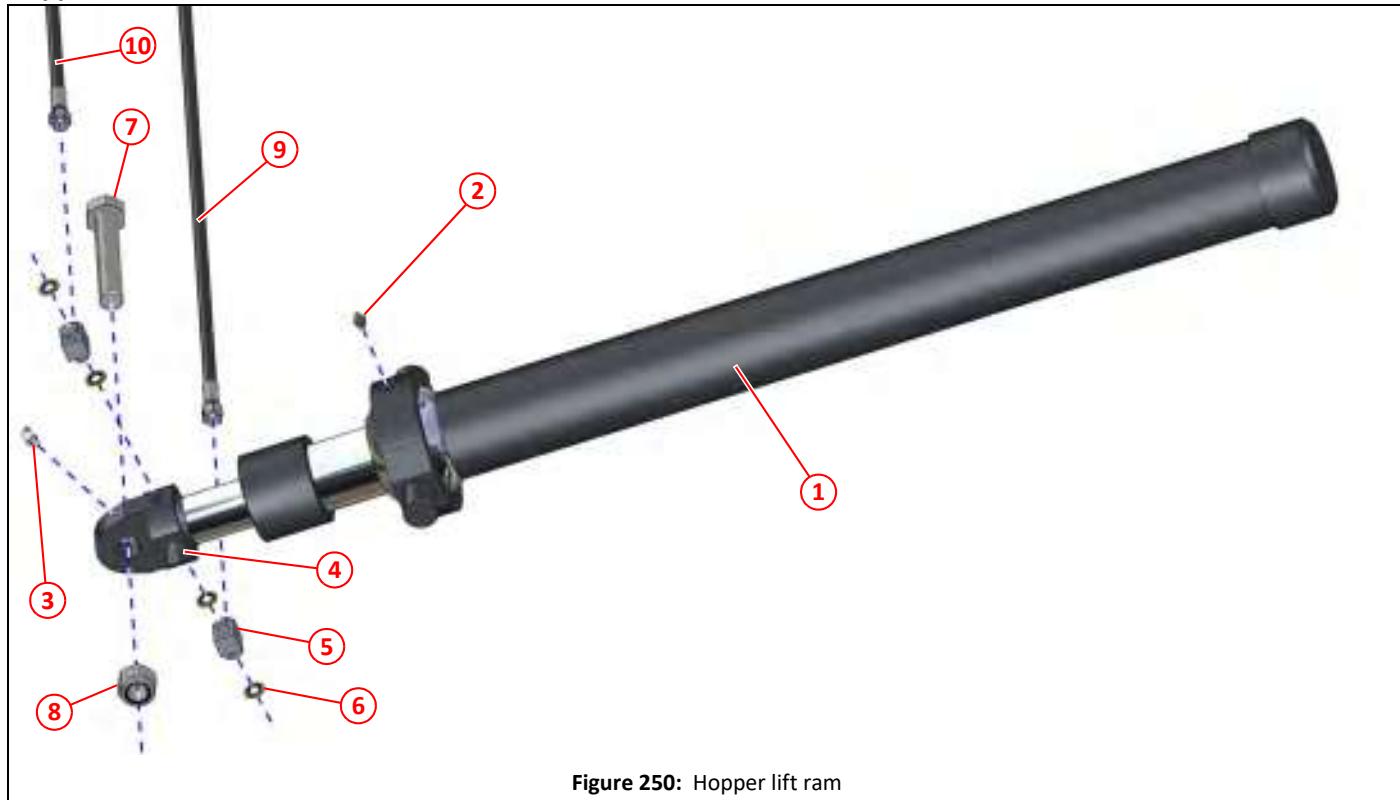
Figure 248: Hopper and rear door control valve - hoses

| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    | 044491  | 1   | Hopper control valve, 12V  | 283 |
| ②    | 039703  | 1   | Hopper control valve, 24V  | 283 |
| ③    | 011308  | 1   | Hose $\frac{3}{8}$ " x 500, Port P to hand pump/main valve block Port HL |     |
| ④    | 011198  | 1   | Tee $\frac{3}{8}$ " BSP, male/male/male                                  |     |
| ⑤    | 011344  | 1   | Hose $\frac{3}{8}$ " x 2100, from main valve block Port HL               |     |
| ⑥    | 001023  | 1   | Hose $\frac{3}{8}$ " x 710, straight and 90° ends, to hand pump          |     |
| ⑦    | 010958  | 1   | Hose $\frac{3}{8}$ ", cut to length as required, return to tank          |     |
| ⑧    | 010516  | 1   | Jubilee clip No. MOO [ $\varnothing$ 11 - $\varnothing$ 16]              |     |
| ⑨    | 001036  | 1   | Hose $\frac{1}{4}$ " x 4100, Port A to hopper door ram close             |     |
| ⑩    | 001036  | 1   | Hose $\frac{1}{4}$ " x 4100, Port B to hopper door ram open              |     |
| ⑪    | 011329  | 1   | Hose $\frac{1}{4}$ " x 1200, Port C to hopper lift ram lower             |     |
| ⑫    | 011329  | 1   | Hose $\frac{1}{4}$ " x 1200, Port D to hopper lift ram raise             |     |

**Hydraulic hand pump**


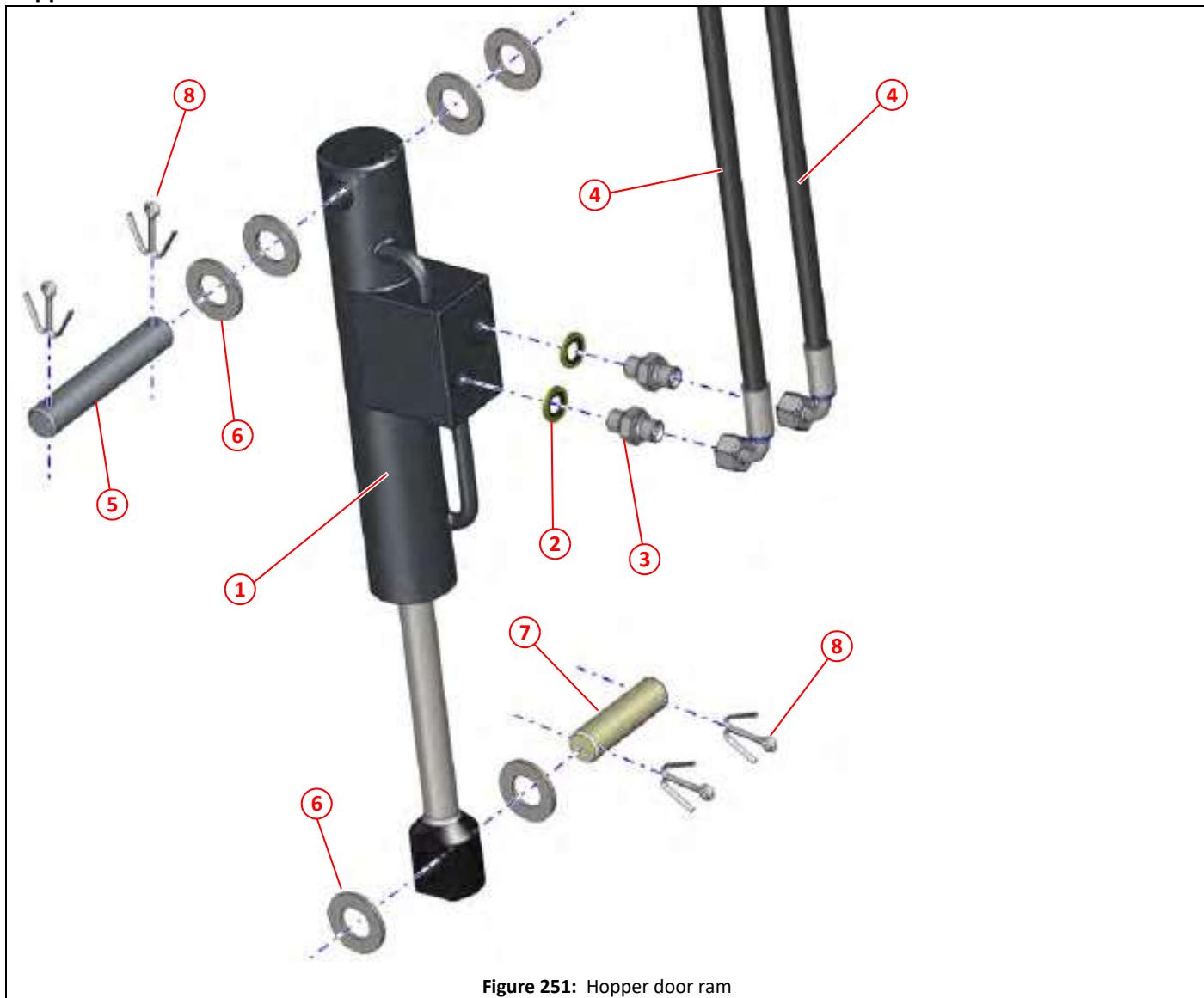
| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 023006  | 1   | Hydraulic hand pump   |
| ②    | 038657  | 1   | Handle  |
| ③    | 011152  | 2   | Dowty seal $\frac{1}{4}$ " BSP  |
| ④    | 011153  | 1   | Dowty seal $\frac{3}{8}$ " BSP  |
| ⑤    | 011199  | 2   | Adapter $\frac{3}{8}$ " x $\frac{1}{4}$ " BSP                                     |
| ⑥    | 002014  | 1   | Adapter, fixed, $\frac{1}{4}$ " BSP male/female                                   |
| ⑦    | 011172  | 1   | Elbow, swivel 3/8" BSP M/F  |
| ⑧    | 001106  | 1   | Hose $\frac{1}{4}$ " x 1820, straight and 90° ends, Port T to tank return         |
| ⑨    | 001023  | 1   | Hose $\frac{3}{8}$ " x 710, straight and 90° ends, Port P to hopper control valve |
| ⑩    | 011198  | 1   | Tee $\frac{3}{8}$ " BSP, male/male/male   |
| ⑪    | 038257  | 1   | Bracket, hand pump  |
| ⑫    | 000221  | 3   | Bolt M6 x 80  |
| ⑬    | 011090  | 3   | Washer M6   |
| ⑭    | 011067  | 4   | Setscrew HT M6 x 20   |
| ⑮    | 011071  | 7   | Nyloc nut R M6  |

## Hopper lift ram



| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 024249  | 1   | Ram, dual acting, hopper lift  |
| ②    | 010903  | 1   | Grease nipple $\frac{1}{8}$ " BSP straight   |
| ③    | 010902  | 1   | Grease nipple $\frac{1}{8}$ " BSP 90°  |
| ④    | 028178  | 2   | Check valve 1CE 30F35S5  |
| ⑤    | 002017  | 2   | Banjo adapter $\frac{1}{4}$ " BSP  |
| ⑥    | 011152  | 4   | Dowty seal $\frac{1}{4}$ " BSP   |
| ⑦    | 000241  | 1   | Bolt HT M24 x 130  |
| ⑧    | 000008  | 1   | Nyloc nut T M24  |
| ⑨    | 011329  | 1   | Hose $\frac{1}{4}$ " x 1200, from Port C hopper control valve to hopper lift ram lower |
| ⑩    | 011329  | 1   | Hose $\frac{1}{4}$ " x 1200, from Port D hopper control valve to hopper lift ram raise |

## Hopper door ram



| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 022511  | 1   | Ram, hopper door                                   |
| ②    | 011152  | 2   | Dowty seal $\frac{1}{4}$ " BSP                     |
| ③    | 011158  | 2   | Adapter $\frac{1}{4}$ " BSP                        |
| ④    | 001216  | 2   | Hose $\frac{1}{4}$ " x 1450, straight and 90° ends |
| ⑤    | 022558  | 1   | Ram pin, rear door                                 |
| ⑥    | 011102  | 6   | Washer M20   |
| ⑦    | 014038  | 1   | Pin 20 x 70  |
| ⑧    | 011122  | 4   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ "     |

### Suction fan motor

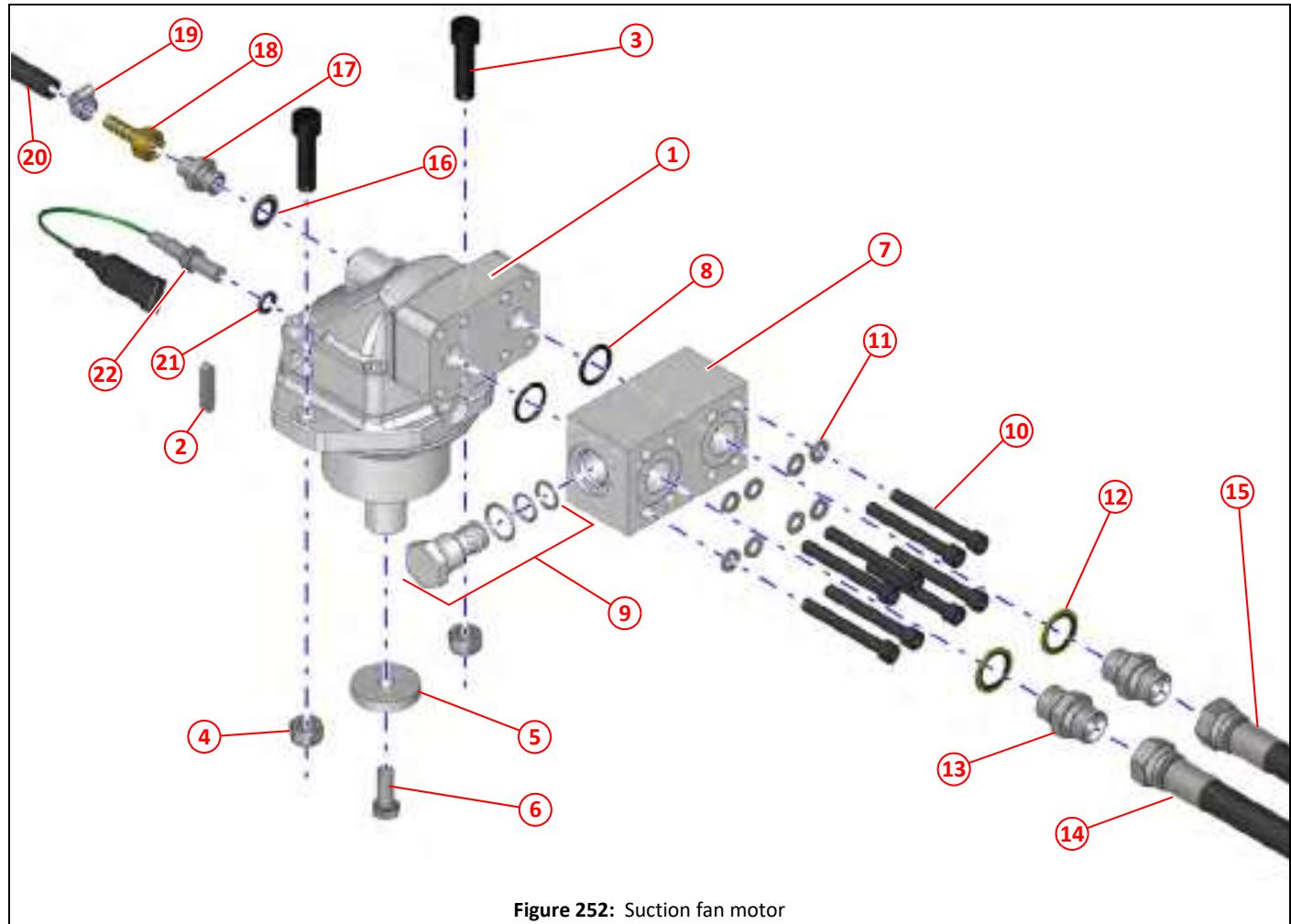


Figure 252: Suction fan motor

| Item | Part No  | Qty | Description   |  |
|------|----------|-----|---|--|
| ①    | 024641   | 1   | Motor F12-030-MF-CH-K-000-000-P                                     |  |
| ②    | 013292   | 1   | Key for item ①  |  |
| ③    | 000343   | 2   | Socket cap head bolt M14 x 50, black                                |  |
| ④    | 011127   | 2   | Nyloc nut T M14   |  |
| ⑤    | 044926   | 1   | Washer ø50 x ø12.5 x 8, stainless steel                             |  |
| ⑥    | 011052   | 1   | Setscrew M12 x 30   |  |
| ⑦    | 041633 * | 1   | Manifold  |  |
| ⑧    | 041634 * | 2   | 'O' ring  |  |
| ⑨    | 041635 * | 1   | Check valve HCV12-20, includes seals                                |  |
| ⑩    | 000048   | 8   | Socket cap head screw M10 x 80                                      |  |
| ⑪    | 011095   | 8   | Spring washer M10   |  |
| ⑫    | 011155   | 2   | Dowty seal $\frac{3}{4}$ " BSP                                      |  |
| ⑬    | 011161   | 2   | Adapter $\frac{3}{4}$ " BSP   |  |
| ⑭    | 001322   | 1   | Hose $\frac{5}{8}$ " x 1550 with $\frac{3}{4}$ " BSP straight ends  |  |
| ⑮    | 001323   | 1   | Hose $\frac{5}{8}$ " x 1700 with $\frac{3}{4}$ " BSP straight ends  |  |
| ⑯    | 011247   | 1   | Dowty seal M18  |  |
| ⑰    | 011248   | 1   | Adapter M18 x $\frac{3}{8}$ " BSP                                   |  |
| ⑱    | 010921   | 1   | $\frac{3}{8}$ " BSP x $\frac{3}{8}$ " hose end, complete with nut   |  |
| ⑲    | 010516   | 1   | Hose clip, worm drive, No MOO [ $\varnothing$ 11- $\varnothing$ 16] |  |
| ⑳    | 010958   | 1   | Hose, $\frac{3}{8}$ ", fuel, length as required                     |  |
| ㉑    | 011215   | 1   | Dowty seal M12  |  |
| ㉒    | 025184   | 1   | Speed sensor  |  |
| *    | 041564   | 1   | Anti-cavitation valve assembly, includes items ⑦, ⑧ and ⑨           |  |

## Steel pipes for suction fan - hopper rear left mounted

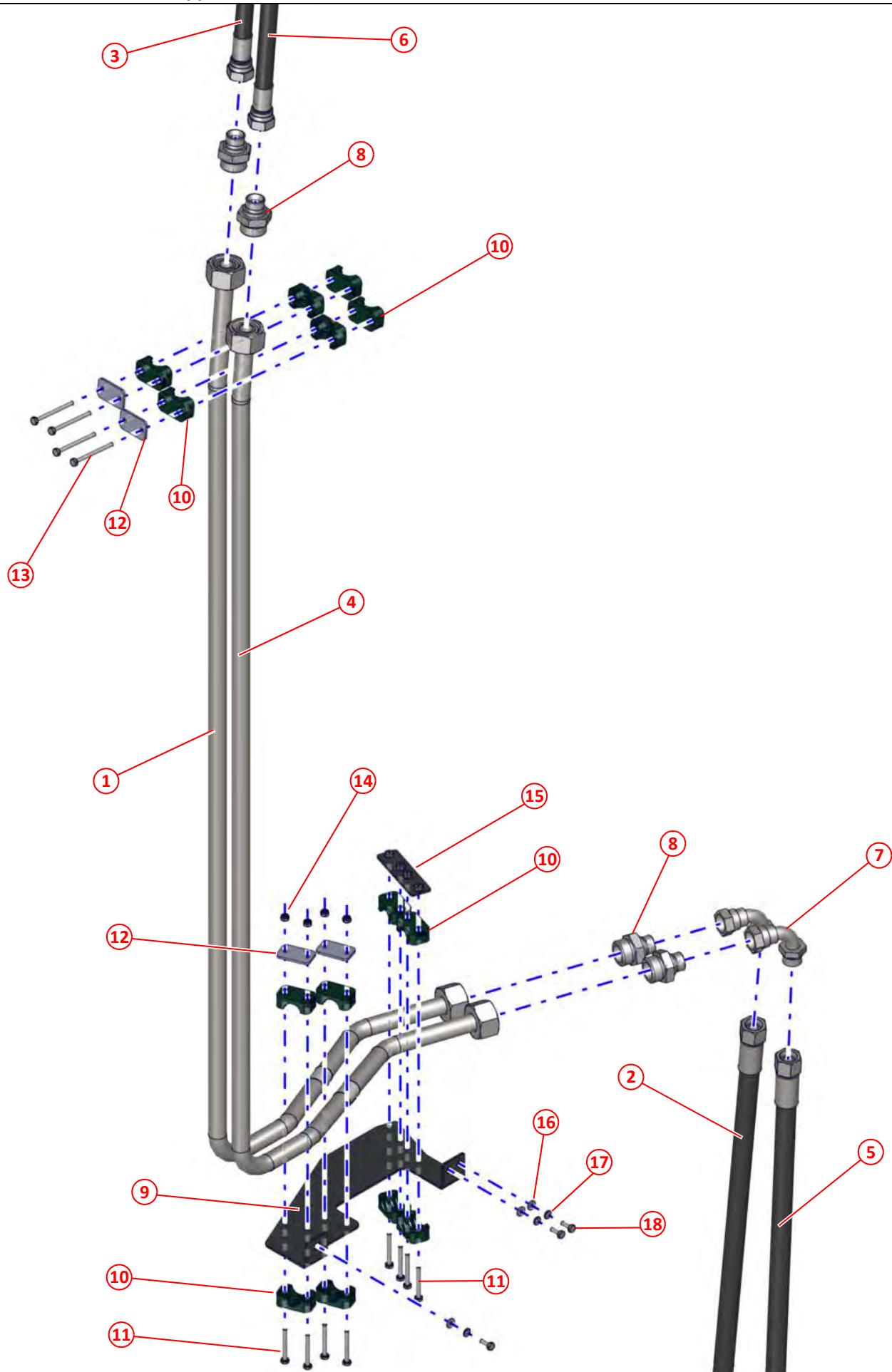


Figure 253: Steel pipes pipes for suction fan - hopper rear left mounted

| Item | Part No | Qty | Description  |  |
|------|---------|-----|--|--|
| ①    | 047043  | 1   | Steel pipe, suction fan, feed, hopper  |  |
| ②    | 001374  | 1   | Hose $\frac{3}{4}$ " x 5900, straight and 90° ends, from fan pump                      |  |
| ③    | 001322  | 1   | Hose $\frac{5}{8}$ " x 1550, straight $\frac{3}{4}$ " BSP ends, to suction fan motor   |  |
| ④    | 047044  | 1   | Steel pipe, suction fan, return, hopper  |  |
| ⑤    | 001375  | 1   | Hose $\frac{3}{4}$ " x 6225, straight and 90° ends, return to tank                     |  |
| ⑥    | 001223  | 1   | Hose $\frac{5}{8}$ " x 2500, straight $\frac{3}{4}$ " BSP ends, from suction fan motor |  |
| ⑦    | 011196  | 2   | Elbow, swept, $\frac{3}{4}$ " BSP, male/female 90°                                     |  |
| ⑧    | 002280  | 4   | Male stud 25 x $\frac{3}{4}$ " BSP   |  |
| ⑨    | 048669  | 1   | Support, steel pipe, suction fan   |  |
| ⑩    | 027982  | 14  | Pipe clamp block, single ø25   |  |
| ⑪    | 011003  | 8   | Setscrew HT M6 x 50  |  |
| ⑫    | 027990  | 4   | Top plate, Pipe clamp, 2 holes, large  |  |
| ⑬    | 011143  | 4   | Setscrew HT M6 x 70  |  |
| ⑭    | 011071  | 4   | Nyloc nut T M6   |  |
| ⑮    | 047047  | 1   | Clamp plate, fan steel pipe  |  |
| ⑯    | 011090  | 3   | Washer M6  |  |
| ⑰    | 011091  | 3   | Spring washer M6   |  |
| ⑱    | 011001  | 3   | Setscrew M6 x 16   |  |

## Steel pipes for hopper rear door ram and suction fan drain - hopper rear right mounted

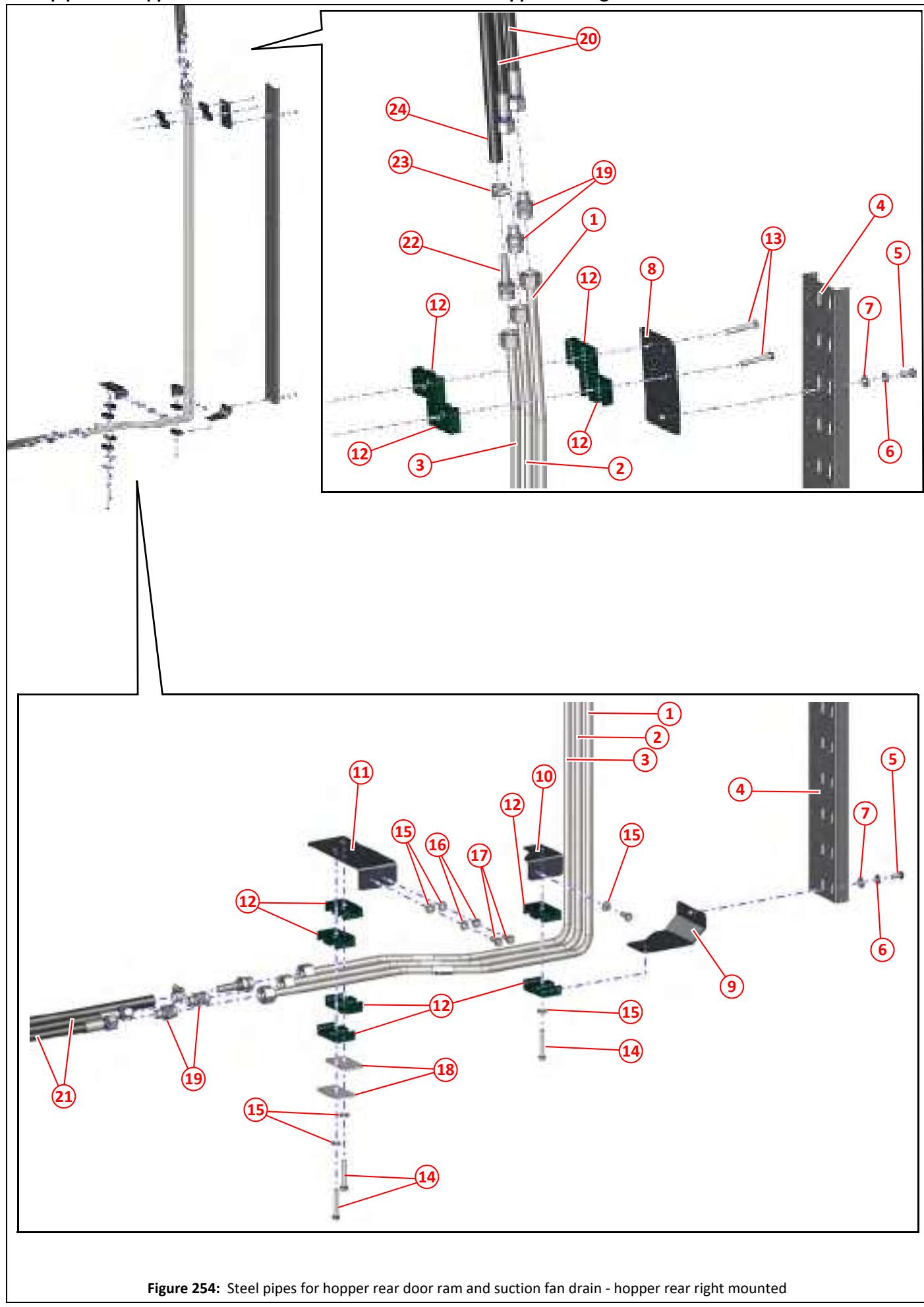


Figure 254: Steel pipes for hopper rear door ram and suction fan drain - hopper rear right mounted

| Item | Part No | Qty | Description  |  |
|------|---------|-----|--|--|
| ①    | 047045  | 1   | Pipe, steel, door open (hopper)                                    |  |
| ②    | 048005  | 1   | Pipe, steel, door close (hopper)                                   |  |
| ③    | 048006  | 1   | Pipe, steel, door services   |  |
| ④    | 048365  | 1   | Plastic cable tray   |  |
| ⑤    | 000373  | 2   | Socket dome head screw M6 x 16, stainless steel                    |  |
| ⑥    | 000255  | 2   | Spring washer M6, stainless steel                                  |  |
| ⑦    | 000254  | 2   | Washer M6, stainless steel   |  |
| ⑧    | 048363  | 1   | Mounting, upper, plastic cable tray                                |  |
| ⑨    | 048361  | 1   | Mounting, lower, plastic cable tray                                |  |
| ⑩    | 048362  | 1   | Support, plastic cable tray  |  |
| ⑪    | 047048  | 1   | Bracket, support, door services                                    |  |
| ⑫    | 043590  | 10  | Pipe clamp block, ø12.7 x ø12.7, double                            |  |
| ⑬    | 000479  | 2   | Socket dome head screw M6 x 40, plated                             |  |
| ⑭    | 000021  | 3   | Setscrew HT M6 x 40  |  |
| ⑮    | 011090  | 6   | Washer M6  |  |
| ⑯    | 011091  | 2   | Spring washer M6   |  |
| ⑰    | 011001  | 3   | Setscrew HT M6 x 16  |  |
| ⑱    | 046465  | 2   | Clamp plate flat, 52 x 30 x 3                                      |  |
| ⑲    | 002086  | 4   | Stud, male 12 x $\frac{1}{4}$ " BSP                                |  |
| ⑳    | 001216  | 2   | Hose $\frac{1}{4}$ " x 1450, straight and 90° ends                 |  |
| ㉑    | 001036  | 2   | Hose $\frac{1}{4}$ " x 4100, straight ends                         |  |
| ㉒    | 002274  | 2   | Adapter, ø12MM 24° cone seat x $\frac{3}{8}$ " hose tail           |  |
| ㉓    | 010516  | 2   | Jubilee clip No. MOO [ø11-ø16mm]                                   |  |
| ㉔    | 010958  | 2   | Hose $\frac{3}{8}$ ", cut to required length(s), suction fan drain |  |

## Hopper door locking arrangement

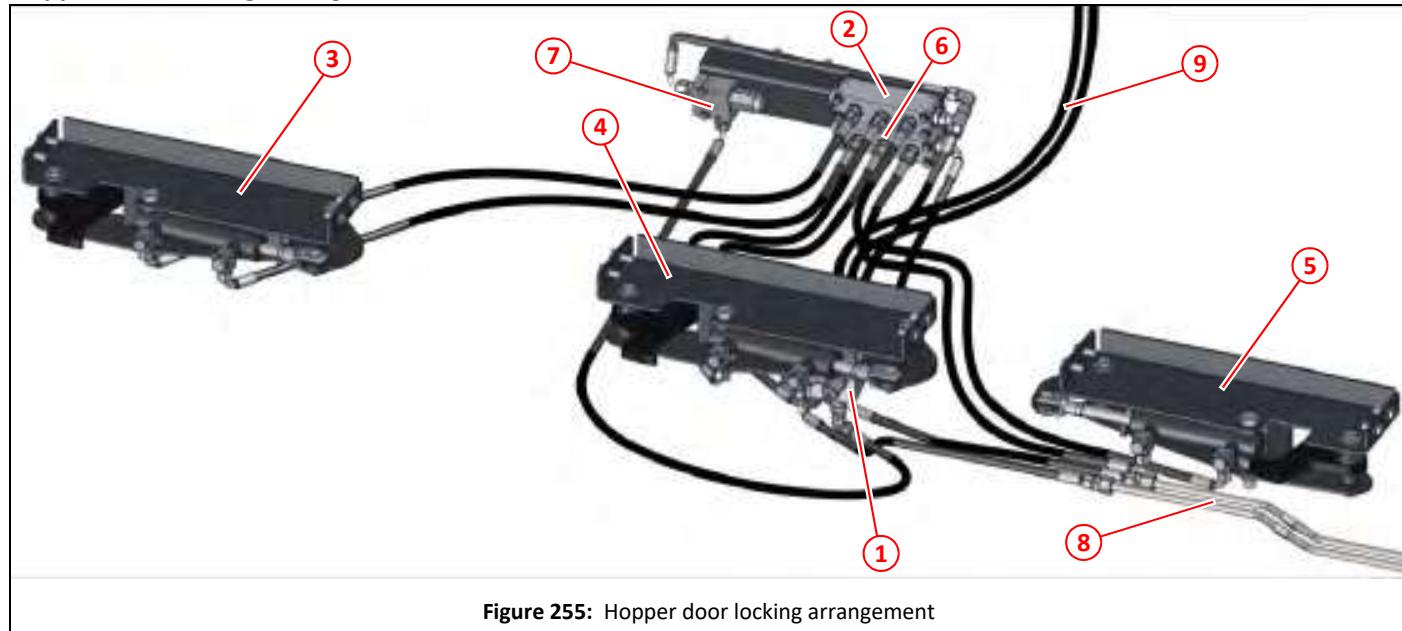
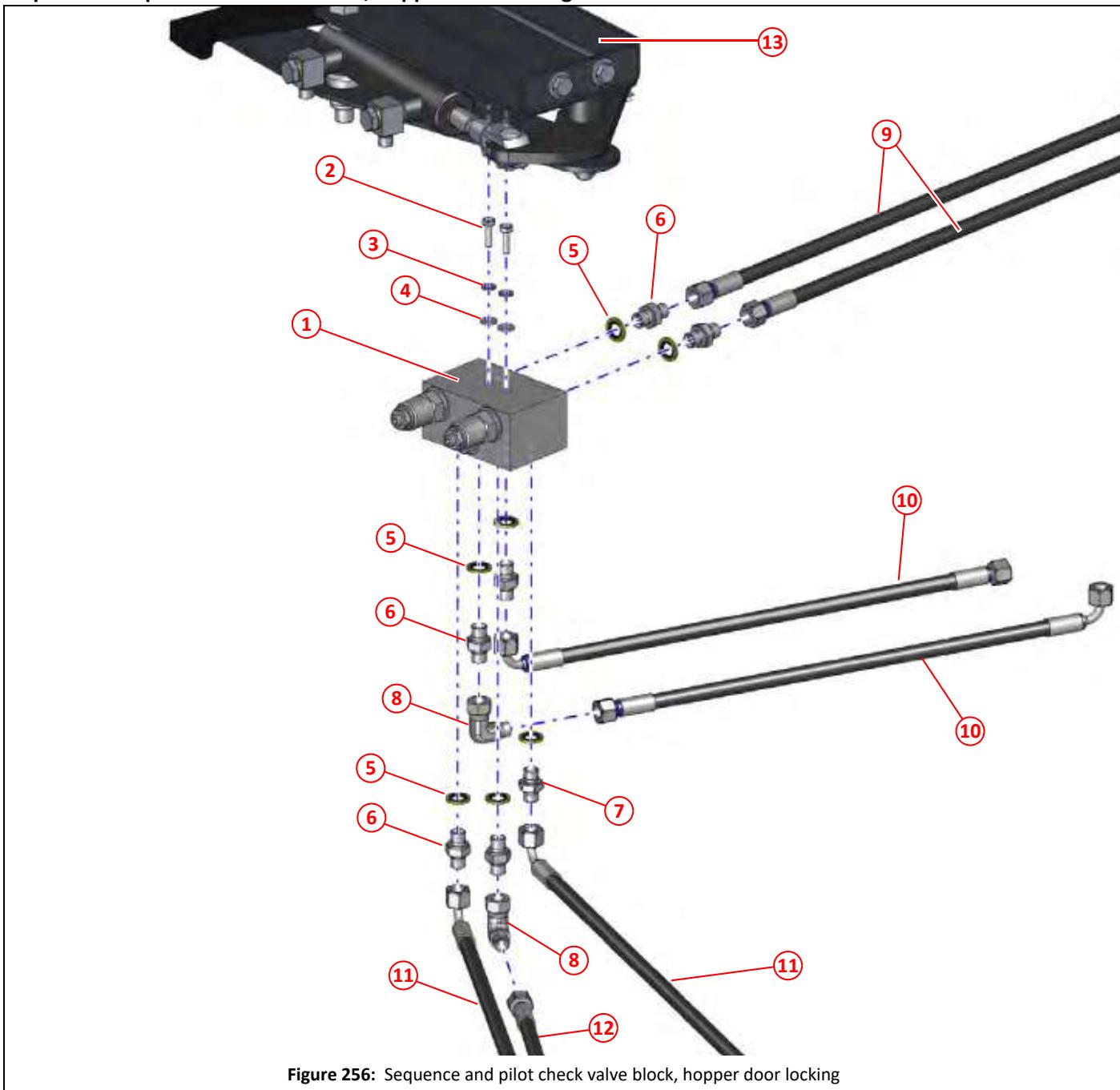


Figure 255: Hopper door locking arrangement

| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    |         |     | Valve sequence and pilot check block, door locking and opening | 295 |
| ②    |         |     | Manifold 1/4" (3 x out) 3/8" (1 x in), ram(s) open             |     |
| ③    |         |     | Door locking, left side  |     |
| ④    |         |     | Door locking, middle   |     |
| ⑤    |         |     | Door locking, right side                                       |     |
| ⑥    |         |     | Manifold 1/4" (3 x out) 3/8" (1 x in), ram(s) close            |     |
| ⑦    |         |     | Pressure relief valve  |     |
| ⑧    |         |     | Steel pipes, door open/close                                   |     |
| ⑨    |         |     | Feed and return hoses from hopper/door controller              |     |

**Sequence and pilot check valve block, hopper door locking**

**Figure 256:** Sequence and pilot check valve block, hopper door locking

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 023483  | 1   | Valve sequence and pilot check block, door locking and opening                       |
| ②    | 011067  | 2   | Setscrew HT M6 x 20  |
| ③    | 011091  | 2   | Spring Washer M6   |
| ④    | 011090  | 2   | Washer M6  |
| ⑤    | 011152  | 7   | Dowty seal $\frac{1}{4}$ " BSP   |
| ⑥    | 011158  | 6   | Adapter $\frac{1}{4}$ " BSP  |
| ⑦    | 012539  | 1   | Restrictor No 5, $\frac{1}{4}$ " BSP x $\frac{1}{4}$ " BSP x $\frac{1}{32}$ ", white |
| ⑧    | 011171  | 2   | Elbow, swivel, male/female, $\frac{1}{4}$ " BSP                                      |
| ⑨    | 001036  | 2   | Hose, $\frac{1}{4}$ " x 4100, straight ends, from/to hopper controller               |
| ⑩    | 001100  | 2   | Hose, $\frac{1}{4}$ " x 460, straight and 90° ends, from/to manifolds (in)           |
| ⑪    | 001251  | 2   | Hose, $\frac{1}{4}$ " x 600, straight and 90° ends, from/to door open ram            |
| ⑫    | 001104  | 1   | Hose, $\frac{1}{4}$ " x 1020, straight and 90° ends, to pressure relief valve        |
| ⑬    |         |     | Door locking, middle   |

## Hopper door locking assembly, middle and left side

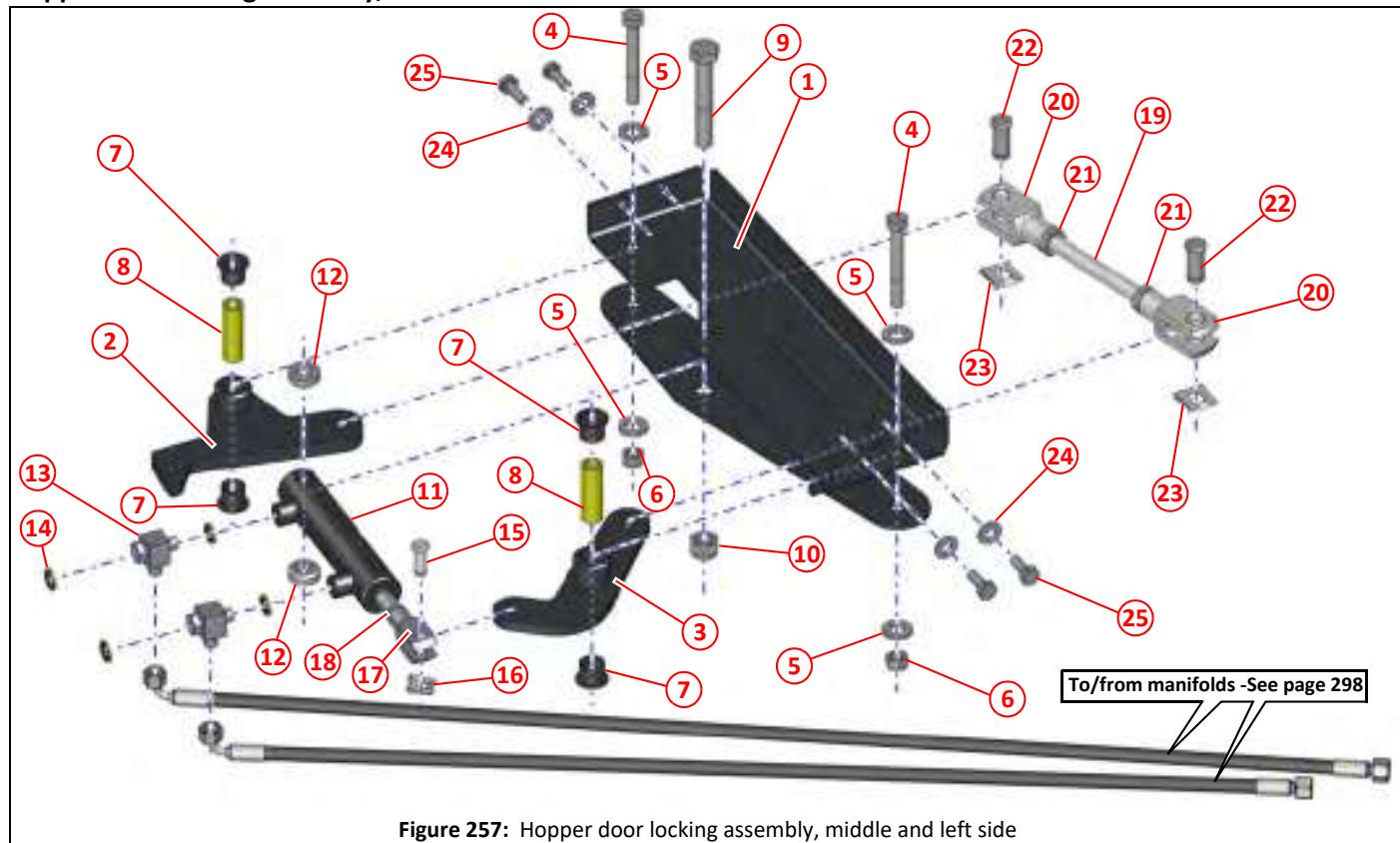
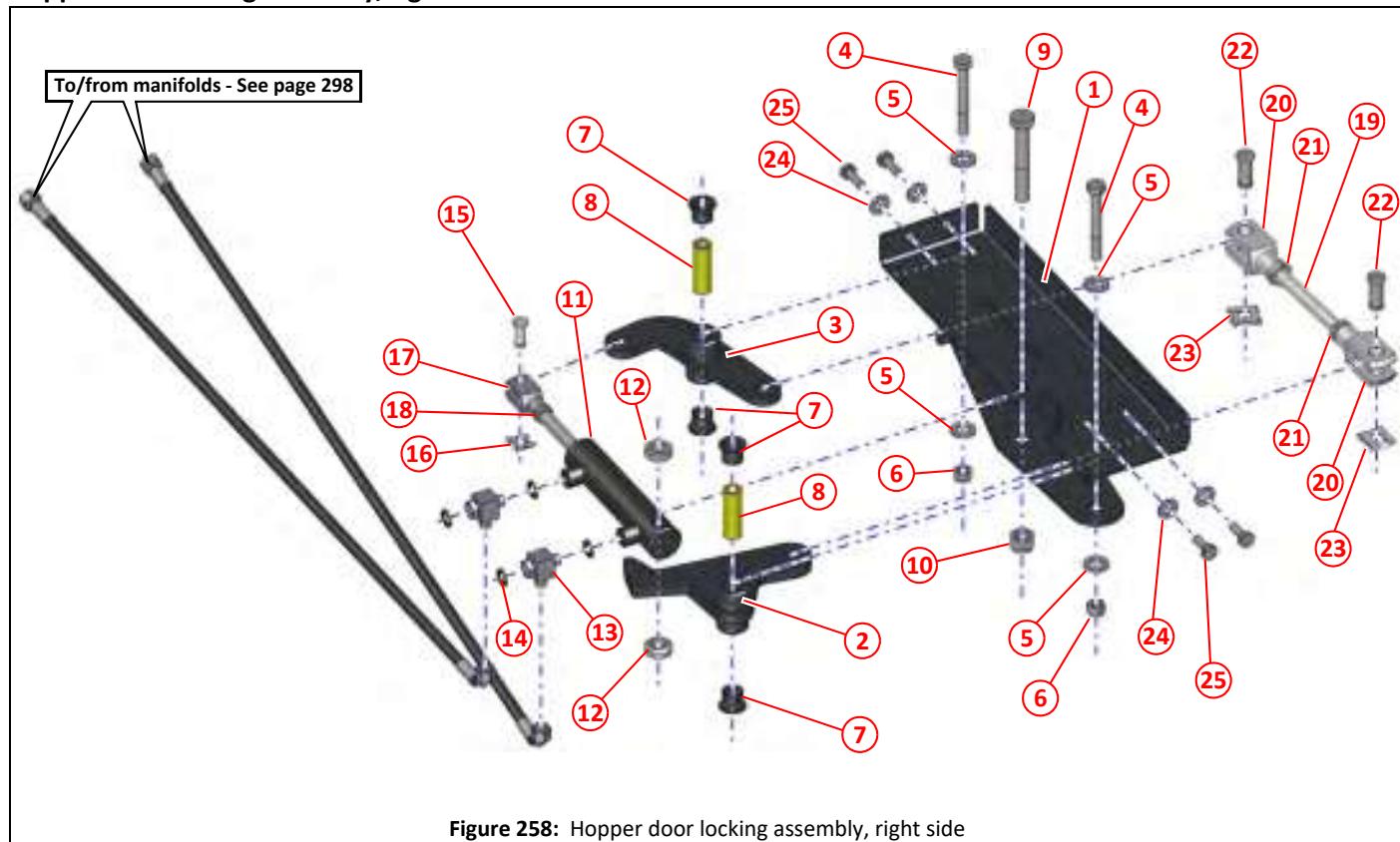


Figure 257: Hopper door locking assembly, middle and left side

| Item | Part No | Qty | Description                                    |
|------|---------|-----|--|
| ①    | 048020  | 1   | Mount, rear door locking, middle and left side |
| ②    | 048021  | 1   | Latch, rear door locking                       |
| ③    | 046892  | 1   | Operating lever, rear door locking             |
| ④    | 000139  | 2   | Bolt M12 x 90 (10.9)                           |
| ⑤    | 011096  | 4   | Washer M12                                     |
| ⑥    | 011077  | 2   | Nyloc nut T M12                                |
| ⑦    | 013488  | 4   | Bush   |
| ⑧    | 022451  | 2   | Spacer ø20 x ø12.5 x 60                        |
| ⑨    | 011133  | 1   | Bolt HT M16 x 100                              |
| ⑩    | 011060  | 1   | Nyloc nut T M16                                |
| ⑪    | 022350  | 1   | Ram, Rear door locking                         |
| ⑫    | 022639  | 2   | Spacer ø30 x ø16 x 10                          |
| ⑬    | 002017  | 2   | Banjo adapter, $\frac{1}{4}$ " BSP             |
| ⑭    | 011152  | 4   | Dowty seal $\frac{1}{4}$ " BSP                 |
| ⑮    | 023270  | 1   | Clevis pin ø12                                 |
| ⑯    | 023269  | 1   | Clip, retaining, ø12                           |
| ⑰    | 014469  | 1   | Clevis M12                                     |
| ⑱    | 000211  | 1   | Locknut, M12 x 1.25                            |
| ⑲    | 047029  | 1   | Connecting link, rear door locking             |
| ⑳    | 020299  | 2   | Clevis M16 x 1.5                               |
| ㉑    | 000138  | 2   | Locknut M16 x 1.5                              |
| ㉒    | 022673  | 2   | Clevis pin (turned)                            |
| ㉓    | 022674  | 2   | Clip, retaining, M16                           |
| ㉔    | 000270  | 4   | Washer M10, stainless steel                    |
| ㉕    | 000280  | 4   | Setscrew M10 x 25, stainless steel             |

**Hopper door locking assembly, right side**

**Figure 258: Hopper door locking assembly, right side**

| Item | Part No | Qty | Description                          |
|------|---------|-----|--------------------------------------|
| ①    | 048019  | 1   | Mount, rear door locking, right site |
| ②    | 048021  | 1   | Latch, rear door locking             |
| ③    | 046892  | 1   | Operating lever, rear door locking   |
| ④    | 000139  | 2   | Bolt M12 x 90 (10.9)                 |
| ⑤    | 011096  | 4   | Washer M12                           |
| ⑥    | 011077  | 2   | Nyloc nut T M12                      |
| ⑦    | 013488  | 4   | Bush                                 |
| ⑧    | 022451  | 2   | Spacer ø20 x ø12.5 x 60              |
| ⑨    | 011133  | 1   | Bolt HT M16 x 100                    |
| ⑩    | 011060  | 1   | Nyloc nut T M16                      |
| ⑪    | 022350  | 1   | Ram, Rear door locking               |
| ⑫    | 022639  | 2   | Spacer ø30 x ø16 x 10                |
| ⑬    | 002017  | 2   | Banjo adapter, $\frac{1}{4}$ " BSP   |
| ⑭    | 011152  | 4   | Dowty seal $\frac{1}{4}$ " BSP       |
| ⑮    | 023270  | 1   | Clevis pin ø12                       |
| ⑯    | 023269  | 1   | Clip, retaining, ø12                 |
| ⑰    | 014469  | 1   | Clevis M12                           |
| ⑱    | 000211  | 1   | Locknut, M12 x 1.25                  |
| ⑲    | 047029  | 1   | Connecting link, rear door locking   |
| ⑳    | 020299  | 2   | Clevis M16 x 1.5                     |
| ㉑    | 000138  | 2   | Locknut M16 x 1.5                    |
| ㉒    | 022673  | 2   | Clevis pin (turned)                  |
| ㉓    | 022674  | 2   | Clip, retaining, M16                 |
| ㉔    | 000270  | 4   | Washer M10, stainless steel          |
| ㉕    | 000280  | 4   | Setscrew M10 x 25, stainless steel   |

## Door locking manifolds and pressure relief valve

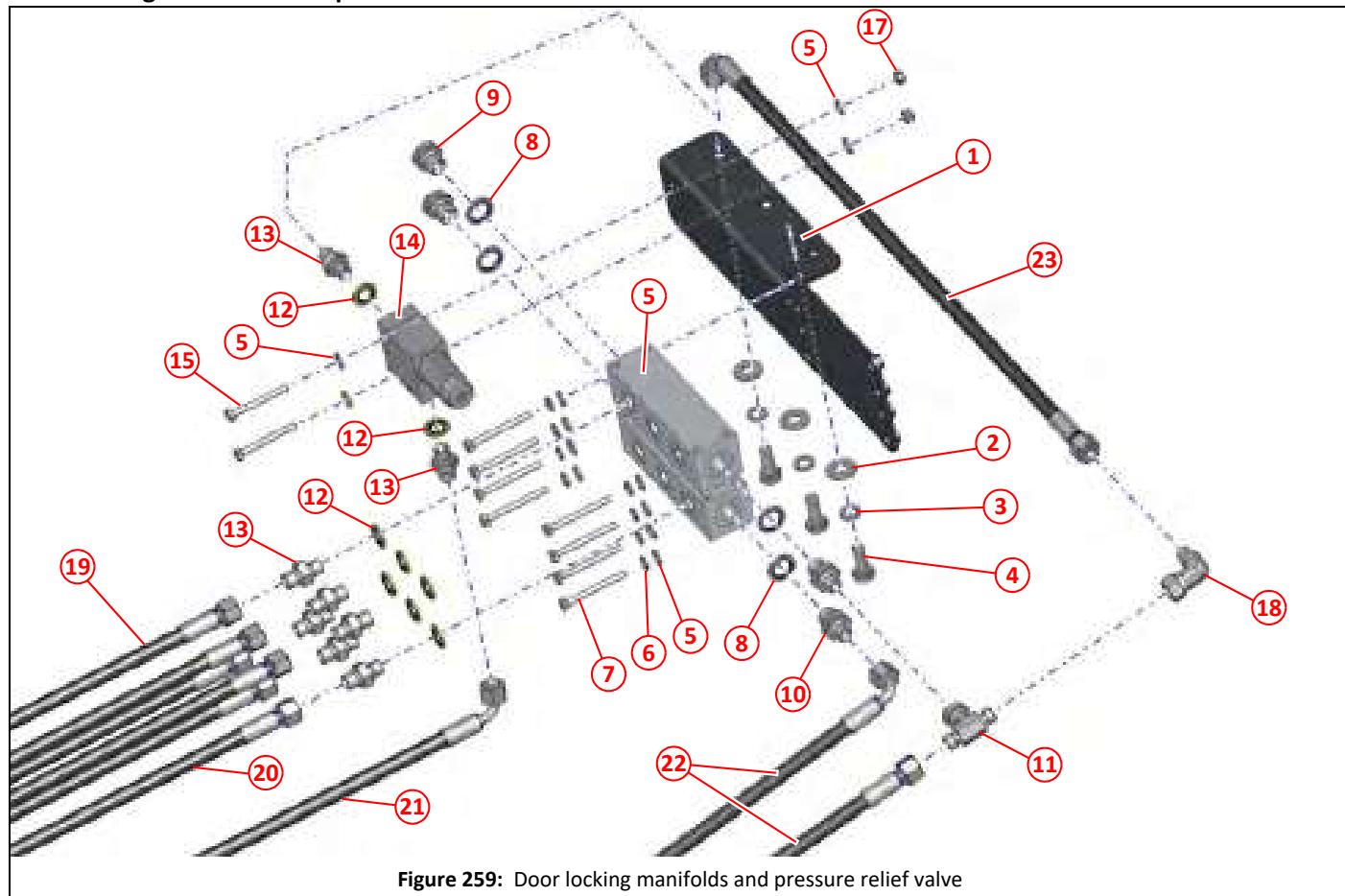
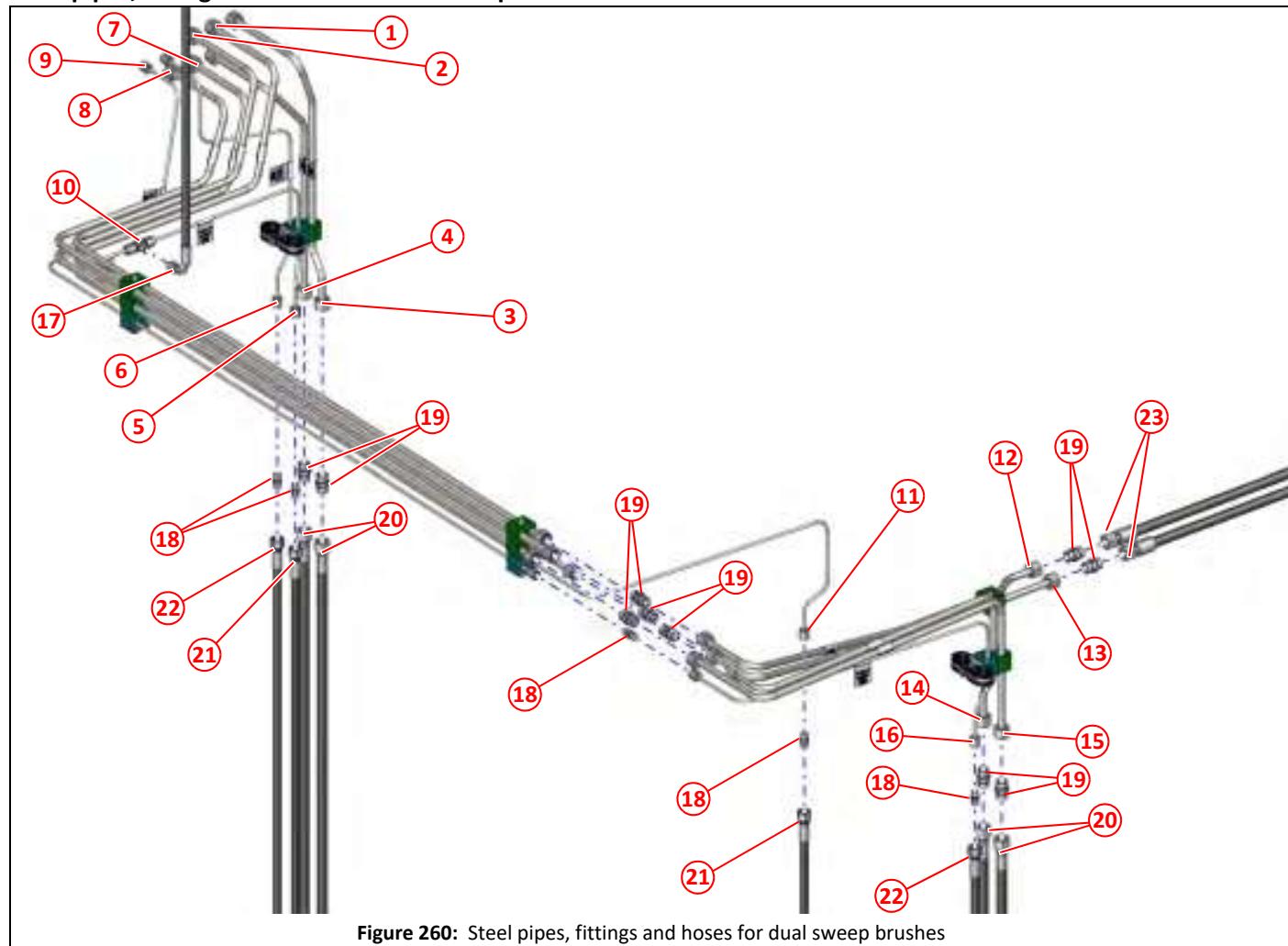


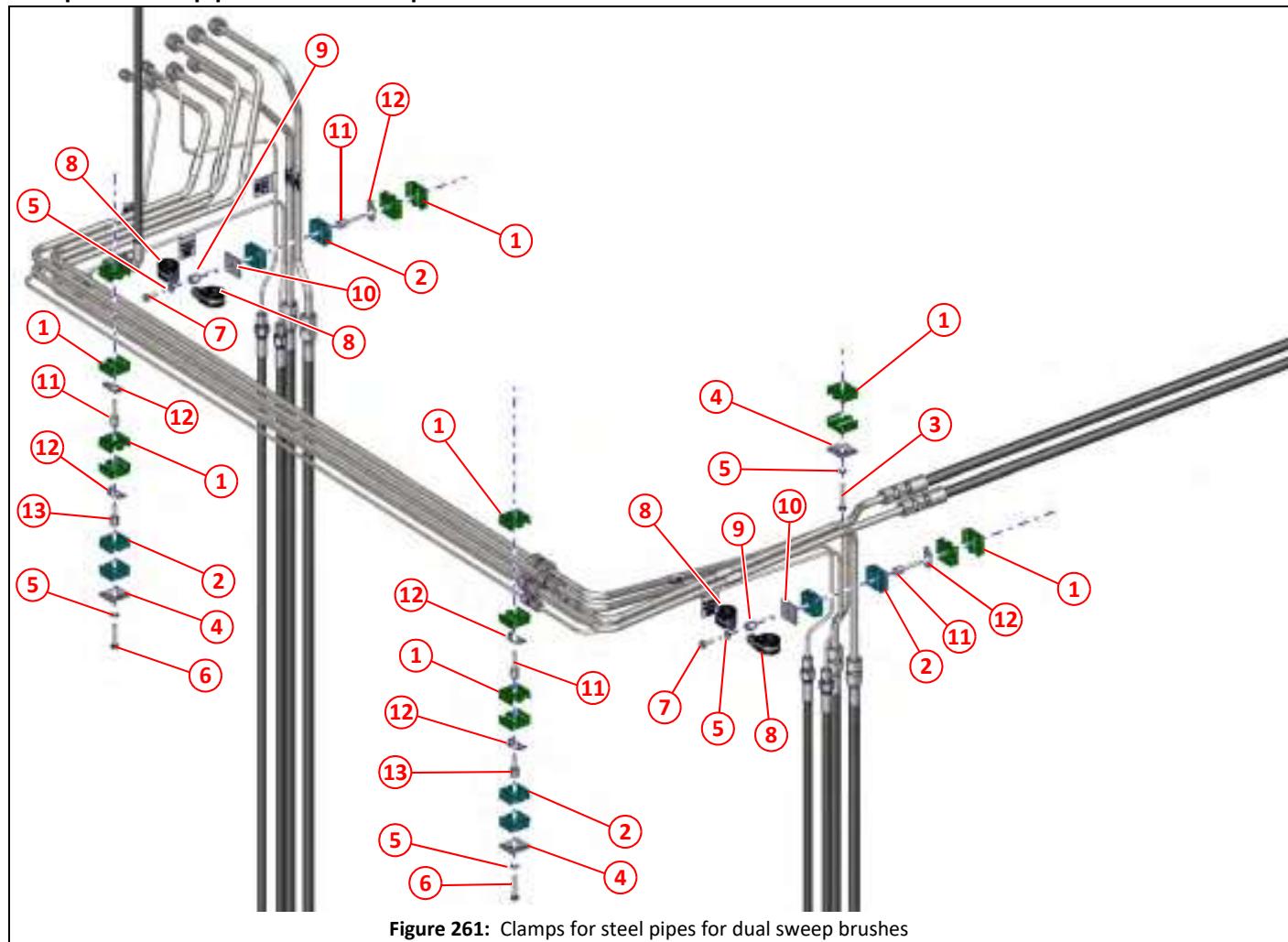
Figure 259: Door locking manifolds and pressure relief valve

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 048477  | 1   | Bracket, manifolds, rear door locking  |
| ②    | 011094  | 3   | Washer M10   |
| ③    | 011095  | 3   | Spring washer M10  |
| ④    | 011031  | 3   | Setscrew HT M10 x 25   |
| ⑤    | 011090  | 12  | Washer M6  |
| ⑥    | 011091  | 8   | Spring washer M6   |
| ⑦    | 000018  | 8   | Setscrew HT M6 x 55  |
| ⑧    | 011153  | 4   | Dowty seal $\frac{3}{8}$ " BSP   |
| ⑨    | 011242  | 2   | Plug $\frac{3}{8}$ " BSP   |
| ⑩    | 011199  | 2   | Adapter $\frac{3}{8}$ " x $\frac{1}{4}$ " BSP  |
| ⑪    | 002009  | 1   | Tee, $\frac{1}{4}$ " BSP, nut on branch  |
| ⑫    | 011152  | 8   | Dowty seal $\frac{1}{4}$ " BSP   |
| ⑬    | 011158  | 8   | Adapter $\frac{1}{4}$ " BSP  |
| ⑭    | 043941  | 1   | Pressure relief valve  |
| ⑮    | 011003  | 2   | Setscrew HT M6 x 50  |
| ⑯    | 047243  | 2   | Manifold $\frac{1}{4}$ " (3 x out) $\frac{3}{8}$ " (1 x in), ram(s) open/close             |
| ⑰    | 011071  | 2   | Nyloc nut T M6   |
| ⑱    | 011171  | 1   | Elbow, $\frac{1}{4}$ " BSP, swivel, male/female  |
| ⑲    | 001101  | 3   | Hose $\frac{1}{4}$ " x 1125, straight and 90° ends, door locking ram extend                |
| ⑳    | 001202  | 3   | Hose $\frac{1}{4}$ " x 1000, straight and 90° ends, door locking ram retract               |
| ㉑    | 001104  | 1   | Hose $\frac{1}{4}$ " x 1020, straight and 90° ends, from sequence valve block port DR      |
| ㉒    | 001100  | 2   | Hose $\frac{1}{4}$ " x 460, straight and 90° ends, from sequence valve block ports A and D |
| ㉓    | 001251  | 1   | Hose $\frac{1}{4}$ " x 600, straight and 90° ends, from pressure relief valve port 1       |

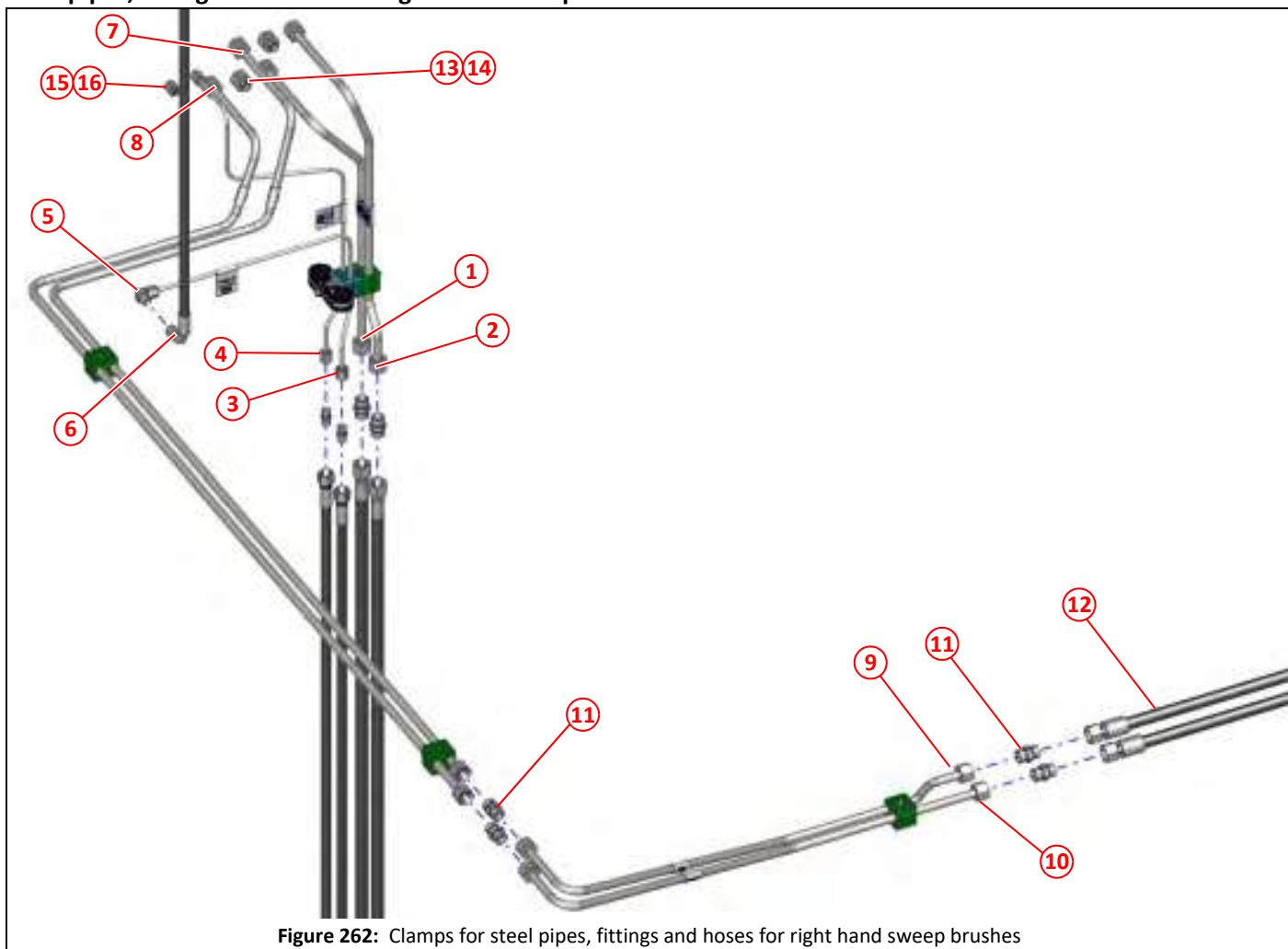
**Steel pipes, fittings and hoses for dual sweep brushes**

**Figure 260: Steel pipes, fittings and hoses for dual sweep brushes**

| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    | 043405  | 1   | Steel pipe, left hand brush motor feed PT 1  |     |
| ②    | 043416  | 1   | Steel pipe, central brush motor feed PT 1  |     |
| ③    | 043412  | 1   | Steel pipe, right hand brush motor feed  |     |
| ④    | 043413  | 1   | Steel pipe, right hand brush motor return  |     |
| ⑤    | 043415  | 1   | Steel pipe, right hand suction nozzle tilt ram   |     |
| ⑥    | 043414  | 1   | Steel pipe, right hand brush lift ram  |     |
| ⑦    | 043407  | 1   | Steel pipe, left hand brush motor return PT 1  |     |
| ⑧    | 043418  | 1   | Steel pipe, central brush motor return PT 1  |     |
| ⑨    | 043409  | 1   | Steel pipe, left hand brush lift ram PT 1  |     |
| ⑩    | 002085  | 1   | Union tee 6mm, body only   |     |
| ⑪    | 043411  | 1   | Steel pipe, left hand suction nozzle tilt ram  |     |
| ⑫    | 043417  | 1   | Steel pipe, central brush motor feed PT 2  |     |
| ⑬    | 043419  | 1   | Steel pipe, central brush motor return PT 2  |     |
| ⑭    | 043406  | 1   | Steel pipe, left hand brush motor feed PT 2  |     |
| ⑮    | 043408  | 1   | Steel pipe, left hand brush motor return PT 2  |     |
| ⑯    | 043410  | 1   | Steel pipe, left hand brush lift ram   |     |
| ⑰    | 001367  | 1   | Hose $\frac{1}{4}$ " x 2220, straight end and 90° stand pipe 6mm end, from control valve block | 272 |
| ⑱    | 002052  | 5   | Union tube/tube 6mm x 6mm, body only   |     |
| ⑲    | 002088  | 10  | Union tube/tube 12mm x 12mm, body only   |     |
| ⑳    | 001372  | 4   | Hose $\frac{3}{8}$ " BSP x 1400, straight and 45°, to and from side brush motor                |     |
| ㉑    | 001371  | 2   | Hose $\frac{1}{4}$ " BSP x 1225, straight and 90°, to side brush lift                          |     |
| ㉒    | 001167  | 2   | Hose $\frac{3}{8}$ " BSP x 1200, straight, to and from central brush motor                     |     |

## Clamps for steel pipes for dual sweep brushes

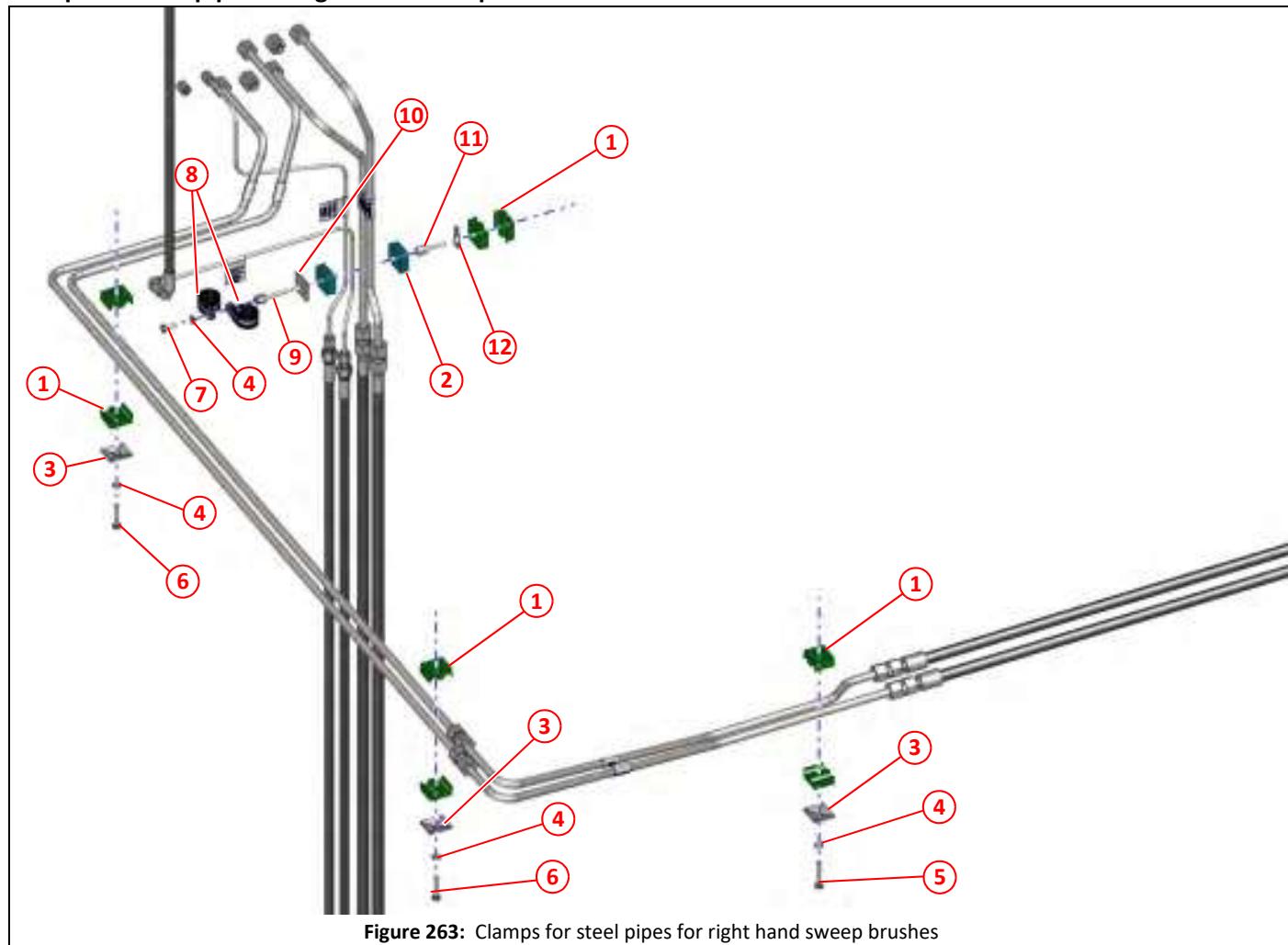


| Item | Part No | Qty | Description                             |
|------|---------|-----|---|
| ①    | 027984  | 14  | Pipe clamp block 12 x 12 double         |
| ②    | 027983  | 8   | Pipe clamp block 6 x 6 double           |
| ③    | 000021  | 1   | Setscrew HT M6 x 40                     |
| ④    | 027996  | 3   | Pipe clamp top plate, 1 hole, small     |
| ⑤    | 011091  | 5   | Spring washer M6                        |
| ⑥    | 011068  | 2   | Bolt HT M6 x 35                         |
| ⑦    | 011001  | 2   | Setscrew HT M6 x 16                     |
| ⑧    | 003001  | 4   | Clip ø22, rubber insert                 |
| ⑨    | 000470  | 2   | Stacking bolt 35, (AF4)                 |
| ⑩    | 028771  | 2   | Hose clamp plate, steel pipe-sub frames |
| ⑪    | 000469  | 4   | Stacking bolt 30, (AF3)                 |
| ⑫    | 000472  | 6   | Locking plate, SIG1                     |
| ⑬    | 000467  | 2   | Stacking bolt 20, (AF1)                 |

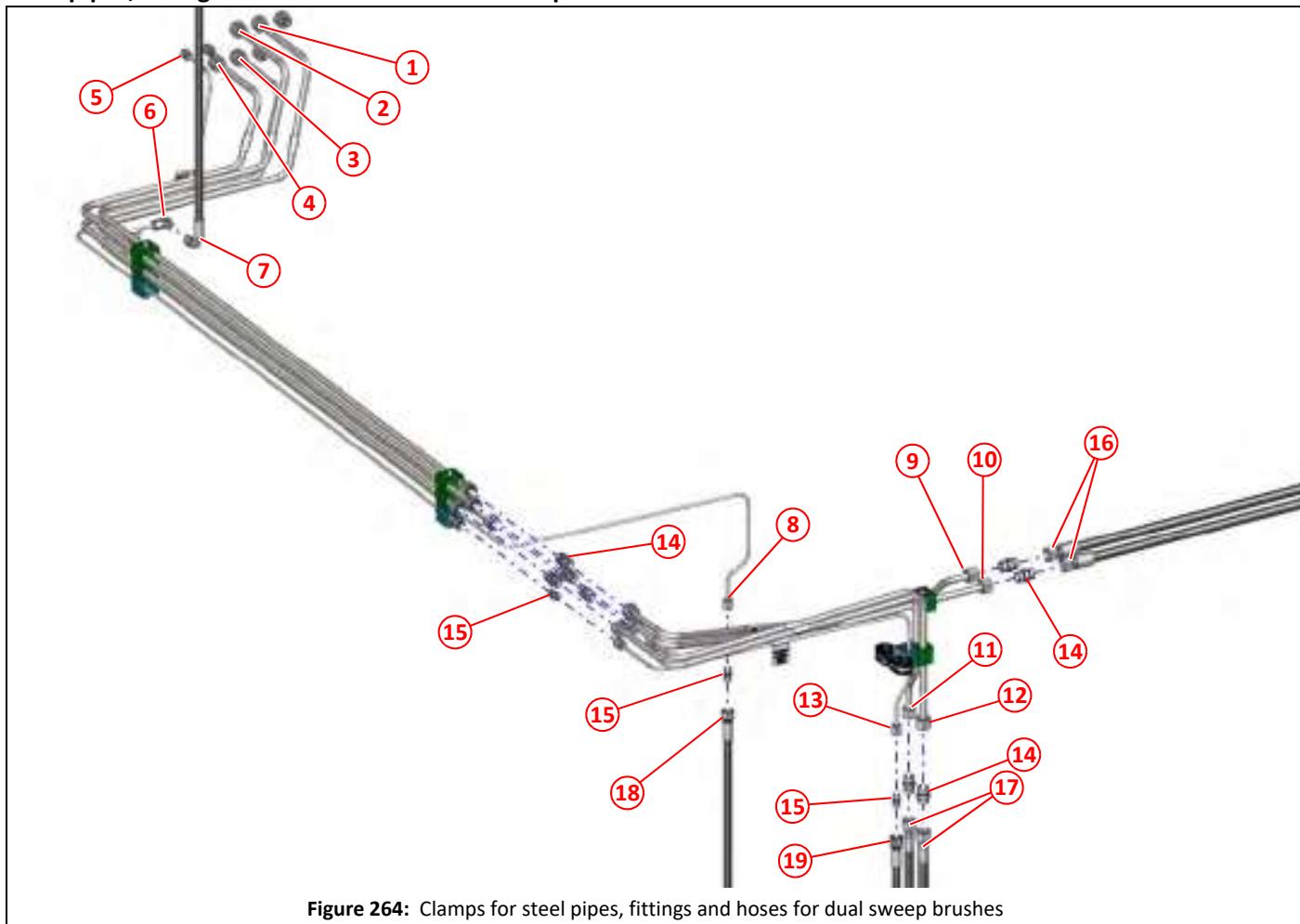
**Steel pipes, fittings and hoses for right hand sweep brushes**

**Figure 262:** Clamps for steel pipes, fittings and hoses for right hand sweep brushes

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 043413  | 1   | Steel pipe, right hand brush motor return  |
| ②    | 043412  | 1   | Steel pipe, right hand brush motor feed  |
| ③    | 043415  | 1   | Steel pipe, right hand suction nozzle tilt ram   |
| ④    | 043414  | 1   | Steel pipe, right hand brush lift ram  |
| ⑤    | 002053  | 1   | Union elbow 6mm x 6mm, body only   |
| ⑥    | 001367  | 1   | Hose $\frac{1}{4}$ " x 2220, straight end and 90° stand pipe 6mm end, from control valve block 272 |
| ⑦    | 043416  | 1   | Steel pipe, central brush motor feed PT 1  |
| ⑧    | 043418  | 1   | Steel pipe, central brush motor return PT 1  |
| ⑨    | 043417  | 1   | Steel pipe, central brush motor feed PT 2  |
| ⑩    | 043419  | 1   | Steel pipe, central brush motor return PT 2  |
| ⑪    | 002088  | 4   | Union tube/tube 12mm x 12mm, body only   |
| ⑫    | 001167  | 2   | Hose $\frac{3}{8}$ " BSP x 1200, straight, to and from central brush motor                         |
| ⑬    | 002236  | 2   | Blanking plug 12mm   |
| ⑭    | 002130  | 2   | Compression nut 12mm   |
| ⑮    | 002235  | 1   | Blanking plug 6mm  |
| ⑯    | 002132  | 1   | Compression nut 6mm  |

## Clamps for steel pipes for right hand sweep brushes

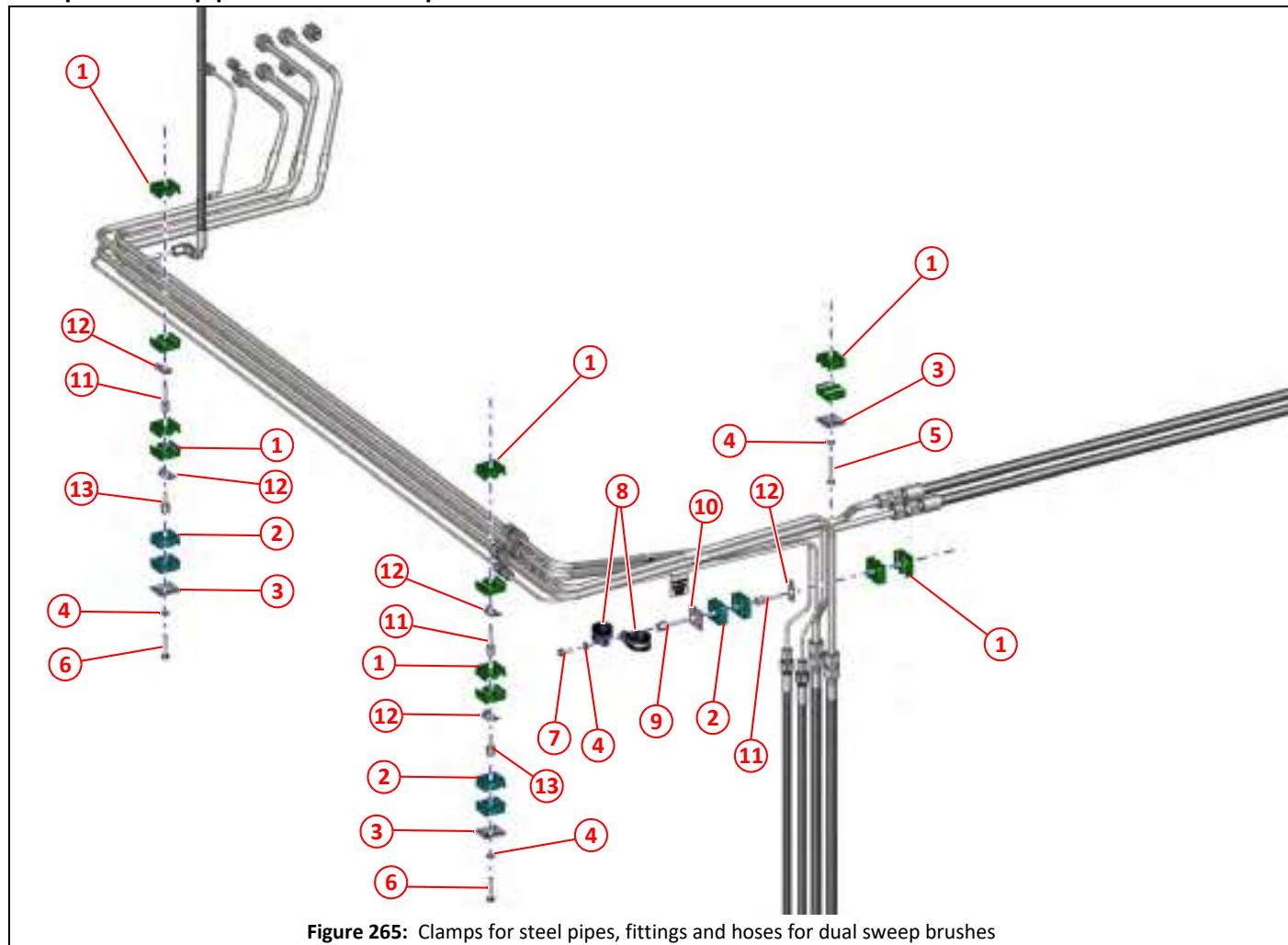


| Item | Part No | Qty | Description                             |
|------|---------|-----|---|
| ①    | 027984  | 8   | Pipe clamp block 12 x 12 double         |
| ②    | 027983  | 2   | Pipe clamp block 6 x 6 double           |
| ③    | 027996  | 3   | Pipe clamp top plate, 1 hole, small     |
| ④    | 011091  | 4   | Spring washer M6                        |
| ⑤    | 000021  | 1   | Setscrew HT M6 x 40                     |
| ⑥    | 011068  | 2   | Bolt HT M6 x 35                         |
| ⑦    | 011001  | 1   | Setscrew HT M6 x 16                     |
| ⑧    | 003001  | 2   | Clip ø22, rubber insert                 |
| ⑨    | 000470  | 1   | Stacking bolt 35, (AF4)                 |
| ⑩    | 028771  | 1   | Hose clamp plate, steel pipe-sub frames |
| ⑪    | 000469  | 1   | Stacking bolt 30, (AF3)                 |
| ⑫    | 000472  | 1   | Locking plate, SIG1                     |

**Steel pipes, fittings and hoses for left hand sweep brushes**

**Figure 264: Clamps for steel pipes, fittings and hoses for dual sweep brushes**

| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    | 043405  | 1   | Steel pipe, left hand brush motor feed, part 1   |     |
| ②    | 043416  | 1   | Steel pipe, central brush motor feed, part 1   |     |
| ③    | 043407  | 1   | Steel pipe, left hand brush motor return, part 1   |     |
| ④    | 043418  | 1   | Steel pipe, central brush motor return, part 1   |     |
| ⑤    | 043409  | 1   | Steel pipe, left hand brush lift ram, part 1   |     |
| ⑥    | 002053  | 1   | Union elbow 6mm x 6mm, body only   |     |
| ⑦    | 001367  | 1   | Hose $\frac{1}{4}$ " x 2220, straight end and 90° stand pipe 6mm end, from control valve block | 272 |
| ⑧    | 043411  | 1   | Steel pipe, left hand suction nozzle tilt ram  |     |
| ⑨    | 043417  | 1   | Steel pipe, central brush motor feed, part 2   |     |
| ⑩    | 043419  | 1   | Steel pipe, central brush motor return, part 2   |     |
| ⑪    | 043406  | 1   | Steel pipe, left hand brush motor feed, part 2   |     |
| ⑫    | 043408  | 1   | Steel pipe, left hand brush motor return, part 2   |     |
| ⑬    | 043410  | 1   | Steel pipe, left hand brush lift ram   |     |
| ⑭    | 002088  | 8   | Union tube/tube 12mm x 12mm, body only   |     |
| ⑮    | 002052  | 3   | Union tube/tube 6mm x 6mm, body only   |     |
| ⑯    | 001167  | 2   | Hose $\frac{3}{8}$ " BSP x 1200, straight, to and from central brush motor                     |     |
| ⑰    | 001372  | 4   | Hose $\frac{3}{8}$ " BSP x 1400, straight and 45°, to and from side brush motor                |     |
| ⑱    | 001372  | 4   | Hose $\frac{3}{8}$ " BSP x 1400, straight and 45°, to and from side brush motor                |     |
| ⑲    | 001371  | 2   | Hose $\frac{1}{4}$ " BSP x 1225, straight and 90°, to side brush lift                          |     |
| ⑳    | 002236  | 2   | Blanking plug 12mm   |     |
| ㉑    | 002130  | 2   | Compression nut 12mm   |     |
| ㉒    | 002235  | 1   | Blanking plug 6mm  |     |
| ㉓    | 002132  | 1   | Compression nut 6mm  |     |

## Clamps for steel pipes left hand sweep brushes



| Item | Part No | Qty | Description                             |
|------|---------|-----|---|
| ①    | 027984  | 12  | Pipe clamp block 12 x 12 double         |
| ②    | 027983  | 6   | Pipe clamp block 6 x 6 double           |
| ③    | 027996  | 3   | Pipe clamp top plate, 1 hole, small     |
| ④    | 011091  | 4   | Spring washer M6                        |
| ⑤    | 000021  | 1   | Setscrew HT M6 x 40                     |
| ⑥    | 011068  | 2   | Bolt HT M6 x 35                         |
| ⑦    | 011001  | 1   | Setscrew HT M6 x 16                     |
| ⑧    | 003001  | 2   | Clip ø22, rubber insert                 |
| ⑨    | 000470  | 1   | Stacking bolt 35, (AF4)                 |
| ⑩    | 028771  | 1   | Hose clamp plate, steel pipe-sub frames |
| ⑪    | 000469  | 3   | Stacking bolt 30, (AF3)                 |
| ⑫    | 000472  | 5   | Locking plate, SIG1                     |
| ⑬    | 000467  | 2   | Stacking bolt 20, (AF1)                 |

## Side brush motor

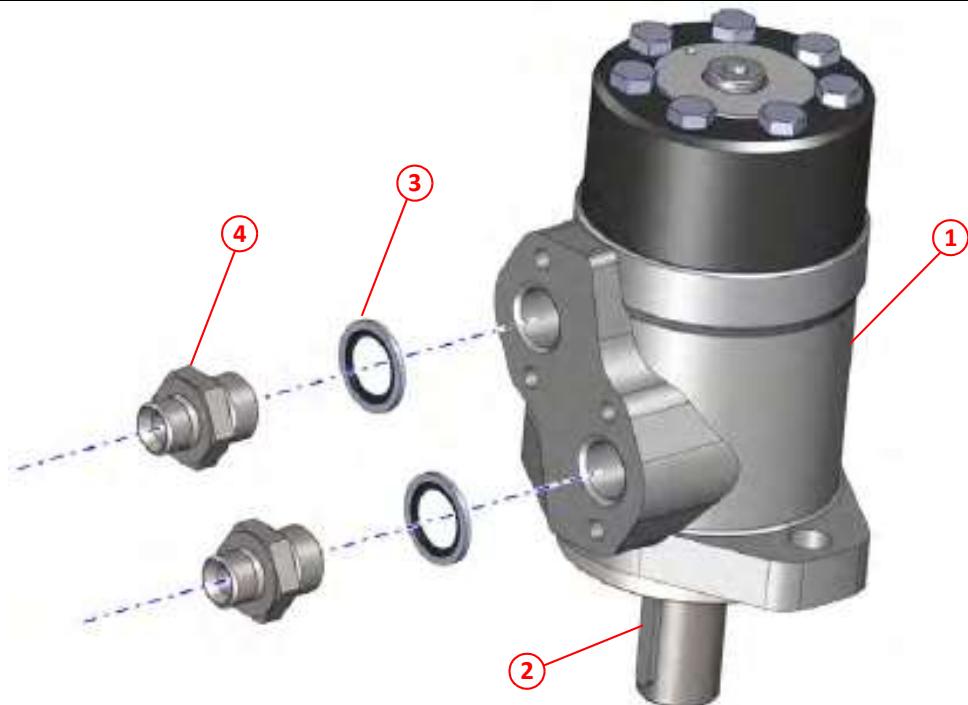


Figure 266: Side brush motor

| Item | Part No | Qty | Description                                   |
|------|---------|-----|---|
| ①    | 010749  | 1   | Motor 3597 (OMP 200)                          |
| ②    | 0111515 | 1   | Key for motor                                 |
| ③    | 011154  | 2   | Dowty seal $\frac{1}{2}$ " BSP                |
| ④    | 011167  | 2   | Adapter $\frac{1}{2}$ " x $\frac{3}{8}$ " BSP |

## Central brush (wide sweep) motor

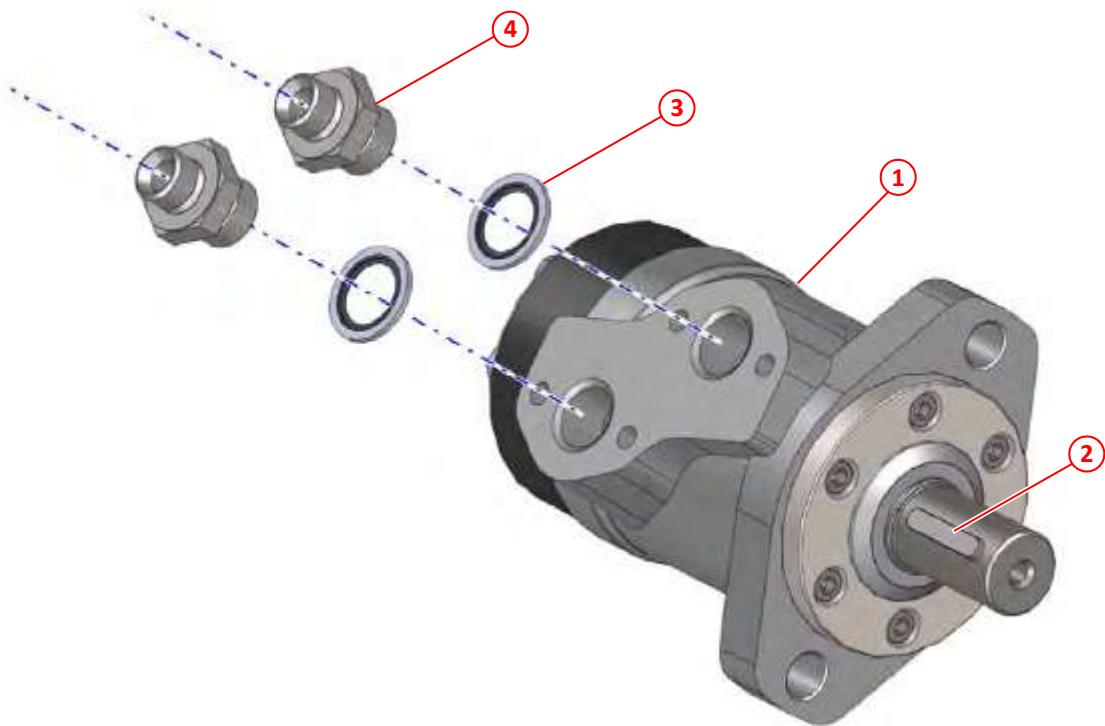


Figure 267: Central brush (wide sweep) motor

| Item | Part No | Qty | Description                                   |
|------|---------|-----|---|
| ①    | 010566  | 1   | Motor 3596 (OMP 100)                          |
| ②    | 011515  | 1   | Key for motor                                 |
| ③    | 011154  | 2   | Dowty seal $\frac{1}{2}$ " BSP                |
| ④    | 011167  | 2   | Adapter $\frac{1}{2}$ " x $\frac{3}{8}$ " BSP |

## Low pressure water pump motor

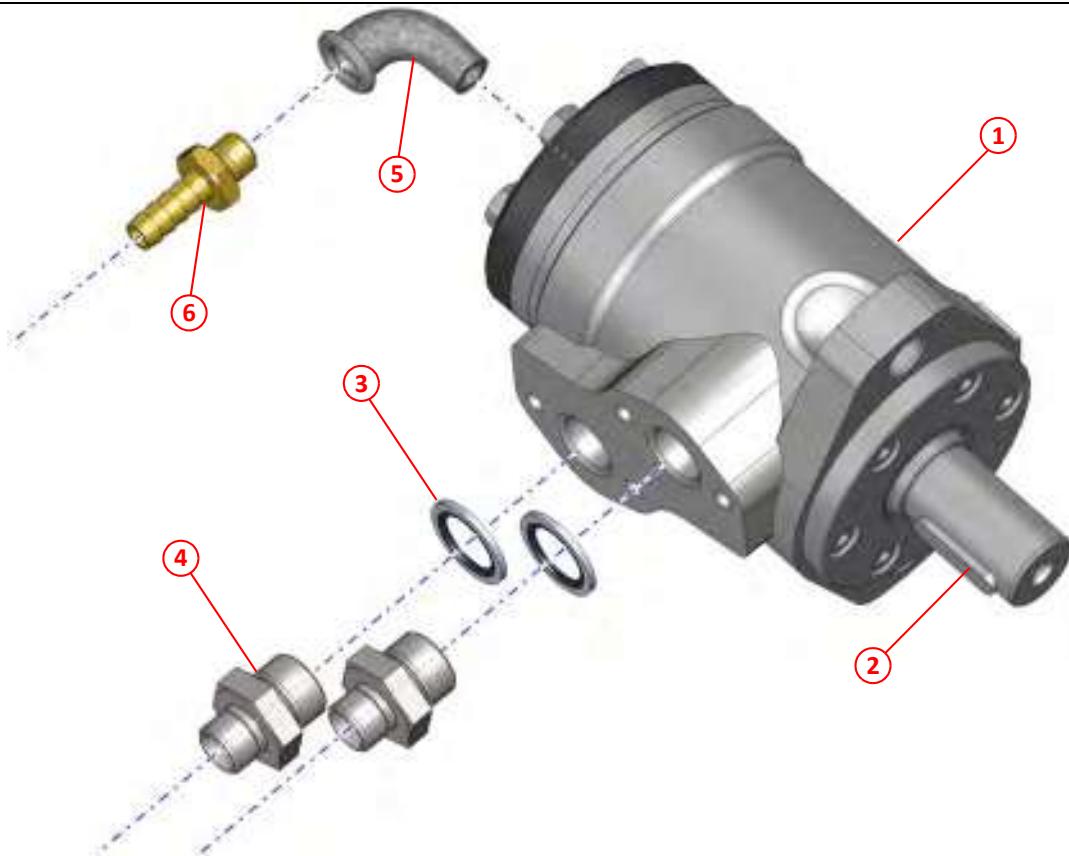


Figure 268: Low pressure water pump motor

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 043778  | 1   | Motor 40cc  |
| ②    | 011515  | 1   | Key for motor   |
| ③    | 011154  | 2   | Dowty seal $\frac{1}{2}$ " BSP                          |
| ④    | 011167  | 2   | Adapter $\frac{1}{2}$ " x $\frac{3}{8}$ " BSP           |
| ⑤    | 010910  | 1   | Elbow, $\frac{1}{4}$ " BSP, male/female                 |
| ⑥    | 010922  | 1   | Adapter $\frac{1}{4}$ " BSP x $\frac{3}{8}$ " hose tail |

## High pressure water pump motor

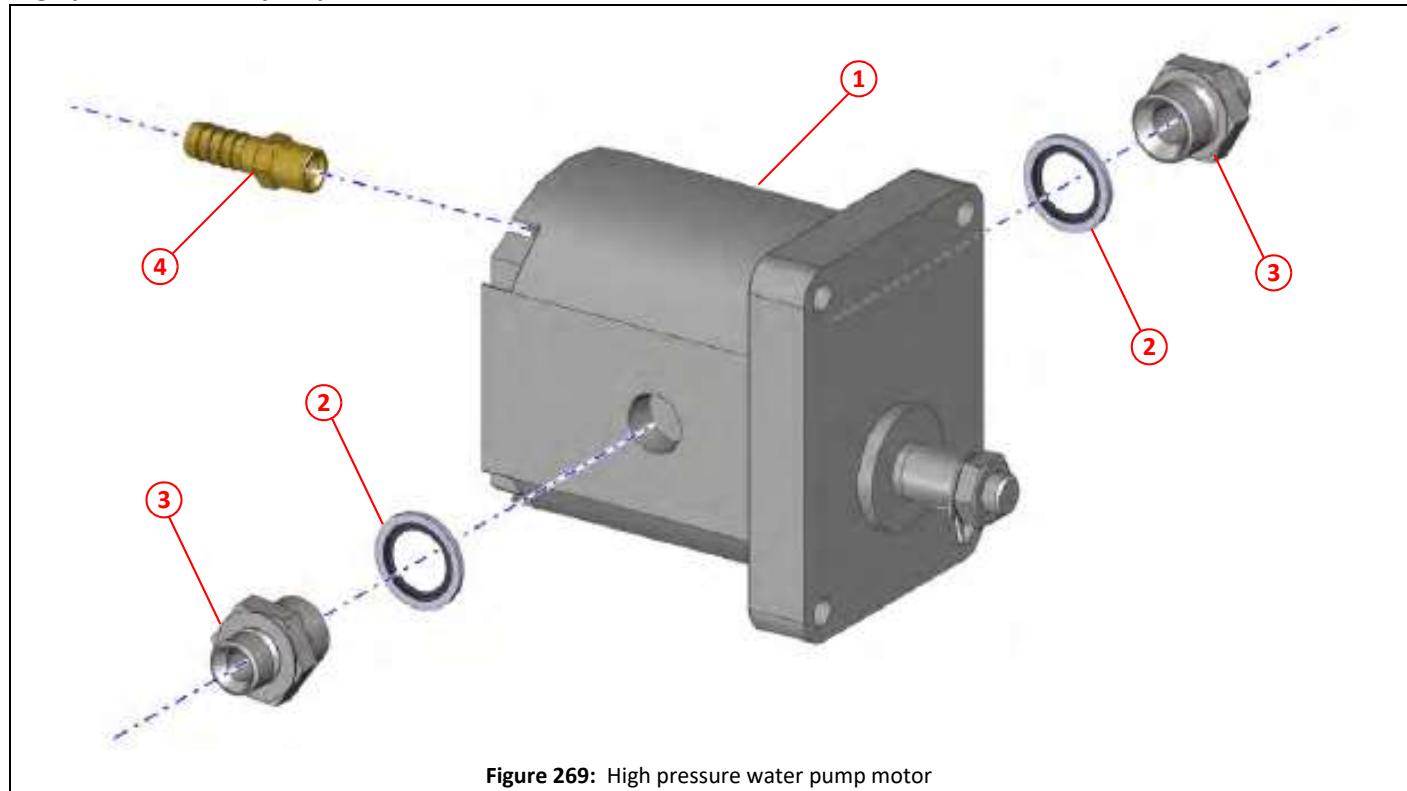
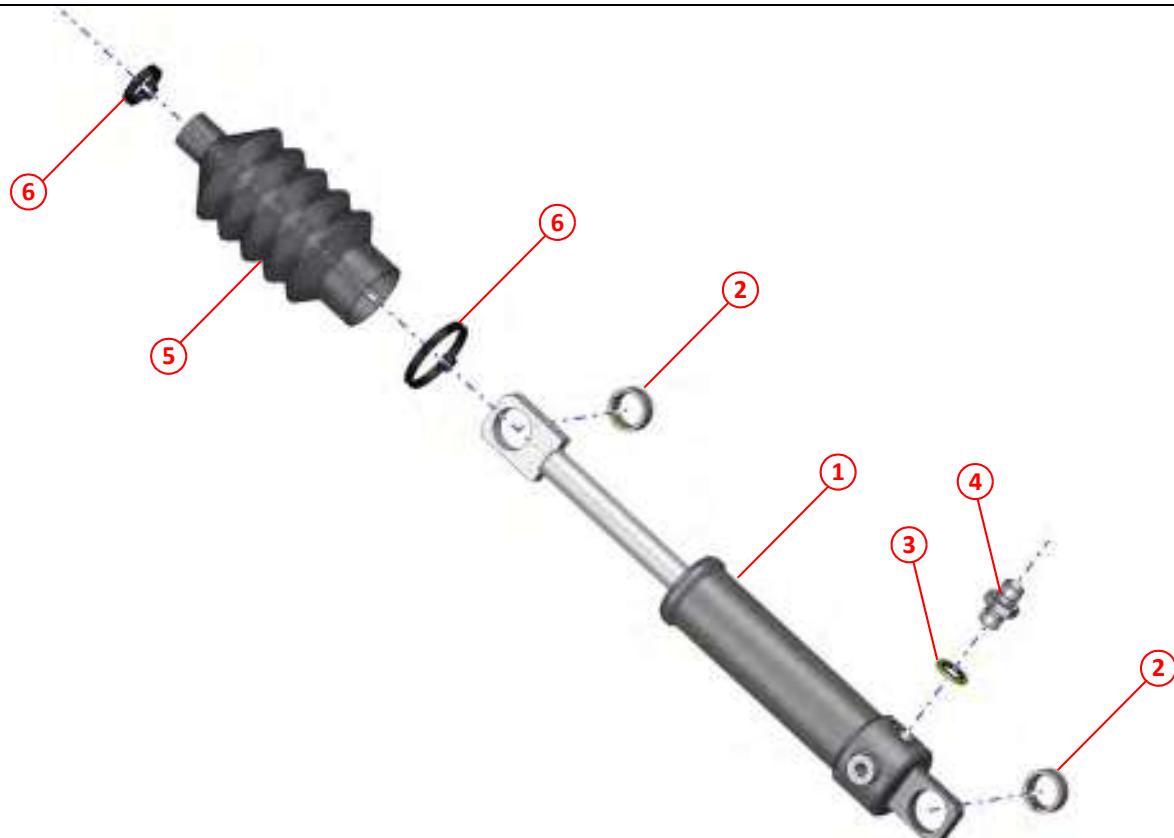


Figure 269: High pressure water pump motor

| Item | Part No | Qty | Description                        | ■   |
|------|---------|-----|------------------------------------|-----|
| ①    | 025373  | 1   | Motor 16cc                         | 243 |
| ②    | 011154  | 2   | Dowty seal 1/2" BSP                |     |
| ③    | 011167  | 2   | Adapter 1/2" x 3/8" BSP            |     |
| ④    | 003010  | 1   | Adapter 1/4" BSPT x 3/8" hose tail |     |

**Side brush lift ram**

**Figure 270: Side brush lift ram**

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 010009  | 1   | Ram 240/340   |
| ②    | 024682  | 2   | Bush ø25 x ø20 x 10   |
| ③    | 011152  | 1   | Dowty seal $\frac{1}{4}$ " BSP  |
| ④    | 012539  | 1   | Restrictor No 5, $\frac{1}{4}$ " x $\frac{1}{4}$ " BSP, $\frac{1}{32}$ ", white |
| ⑤    | 014473  | 1   | Bellows   |
| ⑥    | 005018  | 2   | Cable tie, black x80R   |

## Suction nozzle tilt ram

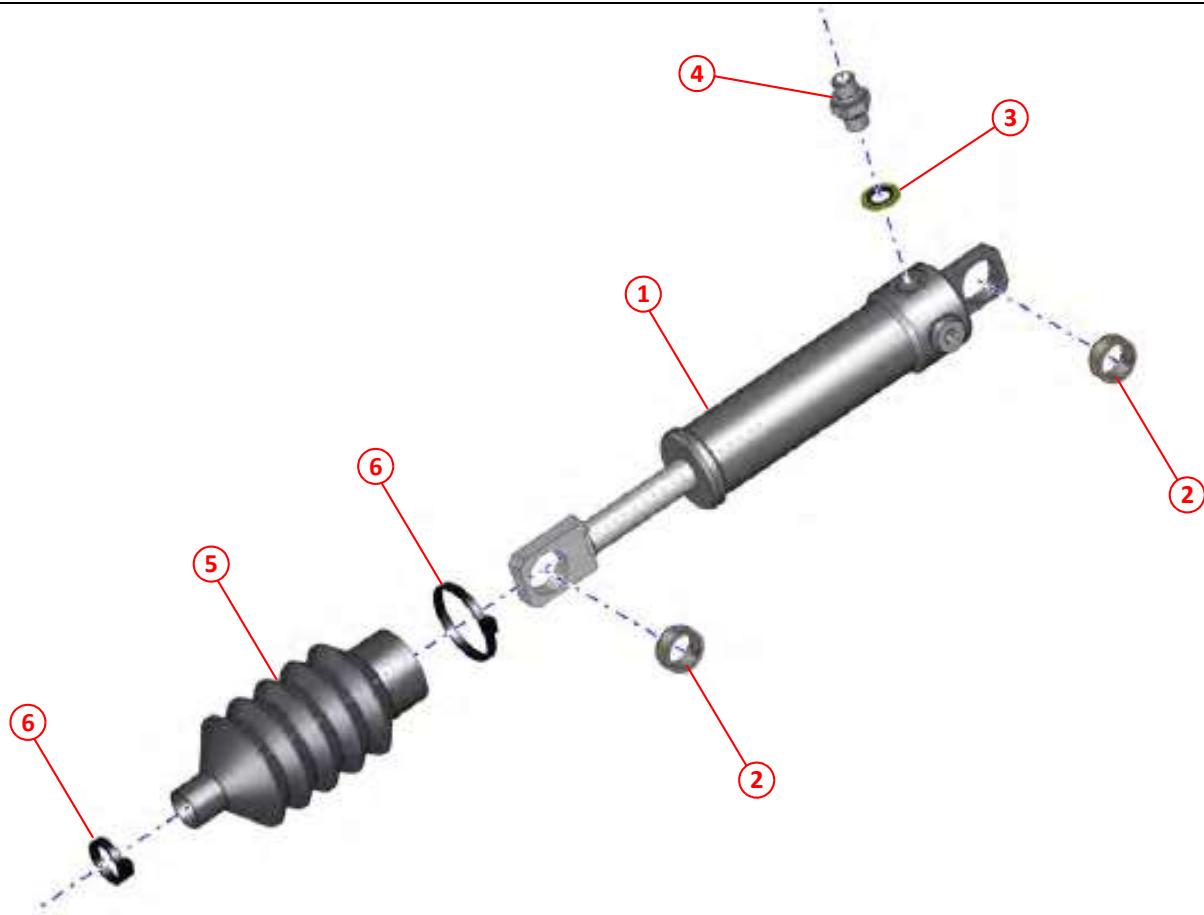


Figure 271: Suction nozzle tilt ram

| Item | Part No | Qty | Description                            |
|------|---------|-----|--|
| ①    | 041954  | 1   | Ram No. 12, 240/340                    |
| ②    | 024682  | 2   | Bush ø25 x ø20 x 10                    |
| ③    | 011152  | 1   | Dowty seal $\frac{1}{4}$ " BSP         |
| ④    | 027188  | 1   | Restrictor 0.6mm x $\frac{1}{4}$ " BSP |
| ⑤    | 014473  | 1   | Bellows                                |
| ⑥    | 005018  | 2   | Cable tie, black x80R                  |

# Pneumatics

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Pneumatic control block and valves, 12V

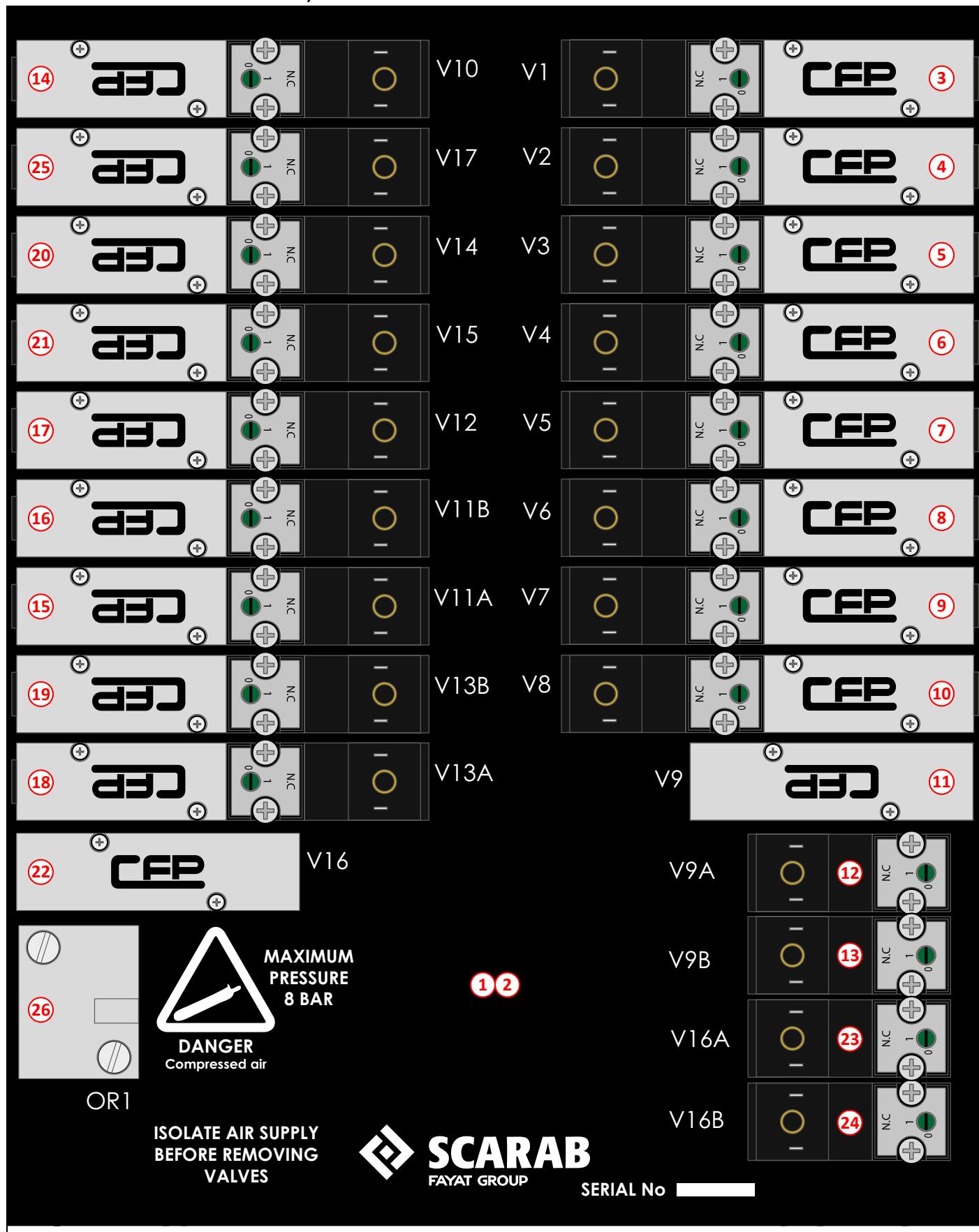


Figure 272: Pneumatic control block and valves, 12V

| Item | Part No | Qty | Description   |  |
|------|---------|-----|---|--|
| ①    | 045303  | 1   | Pneumatic control block (HAF), populated, 12V                                       |  |
| ②    | 045474  | 1   | Pneumatic control block (HAF), bare   |  |
| ③    | 045406  | 1   | V1 - 5/2 HT solenoid & spring valve 12V, LH side brush in/out                       |  |
| ④    | 045406  | 1   | V2 - 5/2 HT solenoid & spring valve 12V, LH suction nozzle lift/lower               |  |
| ⑤    | 045406  | 1   | V3 - 5/2 HT solenoid & spring valve 12V, LH auto blanking flap open/close           |  |
| ⑥    | 045406  | 1   | V4 - 5/2 HT solenoid & spring valve 12V, RH auto blanking flap open/close           |  |
| ⑦    | 045406  | 1   | V5 - 5/2 HT solenoid & spring valve 12V, RH suction nozzle open/close               |  |
| ⑧    | 045406  | 1   | V6 - 5/2 HT solenoid & spring valve 12V, RH side brush in/out                       |  |
| ⑨    | 045406  | 1   | V7 - 5/2 HT solenoid & spring valve 12V, central brush (wide sweep) swivel/slew     |  |
| ⑩    | 045406  | 1   | V8 - 5/2 HT solenoid & spring valve 12V, rear boom flap                             |  |
| ⑪    | 045383  | 1   | V9 - 5/2 HT pilot/pilot valve, full pressure side brush                             |  |
| ⑫    | 045382  | 1   | V9A - 5/2 HT 15mm solenoid 12V, full pressure side brush down                       |  |
| ⑬    | 045382  | 1   | V9B - 5/2 HT 15mm solenoid 12V, full pressure side brush up                         |  |
| ⑭    | 045406  | 1   | V10 - 5/2 HT solenoid & spring valve 12V, hopper prop                               |  |
| ⑮    | 045406  | 1   | V11A - 5/2 HT solenoid & spring valve 12V, side brush pressure up                   |  |
| ⑯    | 045406  | 1   | V11B - 5/2 HT solenoid & spring valve 12V, side brush pressure down                 |  |
| ⑰    | 045406  | 1   | V12 - 5/2 HT solenoid & spring valve 12V, central brush (wide sweep) lift/lower     |  |
| ⑱    | 045406  | 1   | V13A - 5/2 HT solenoid & spring valve 12V, central brush (wide sweep) up pressure   |  |
| ⑲    | 045406  | 1   | V13B - 5/2 HT solenoid & spring valve 12V, central brush (wide sweep) down pressure |  |
| ⑳    | 045406  | 1   | V14 - 5/2 HT solenoid & spring valve 12V, auxiliary brush slide out                 |  |
| ㉑    | 045406  | 1   | V15 - 5/2 HT solenoid & spring valve 12V, auxiliary brush lower                     |  |
| ㉒    | 045384  | 1   | V16 - 5/3 HT pilot/pilot valve, air operated rear boom                              |  |
| ㉓    | 045382  | 1   | V16A - 5/2 HT 15mm solenoid 12V, air operated rear boom raise                       |  |
| ㉔    | 045382  | 1   | V16B - 5/2 HT 15mm solenoid 12V, air operated rear boom lower                       |  |
| ㉕    | 045406  | 1   | V17 - 5/2 HT solenoid/spring valve 12V, auxiliary brush swing in/out                |  |
| ㉖    | 032710  | 1   | OR1 - OR gate valve   |  |

## Pneumatic control block and valves, 24V

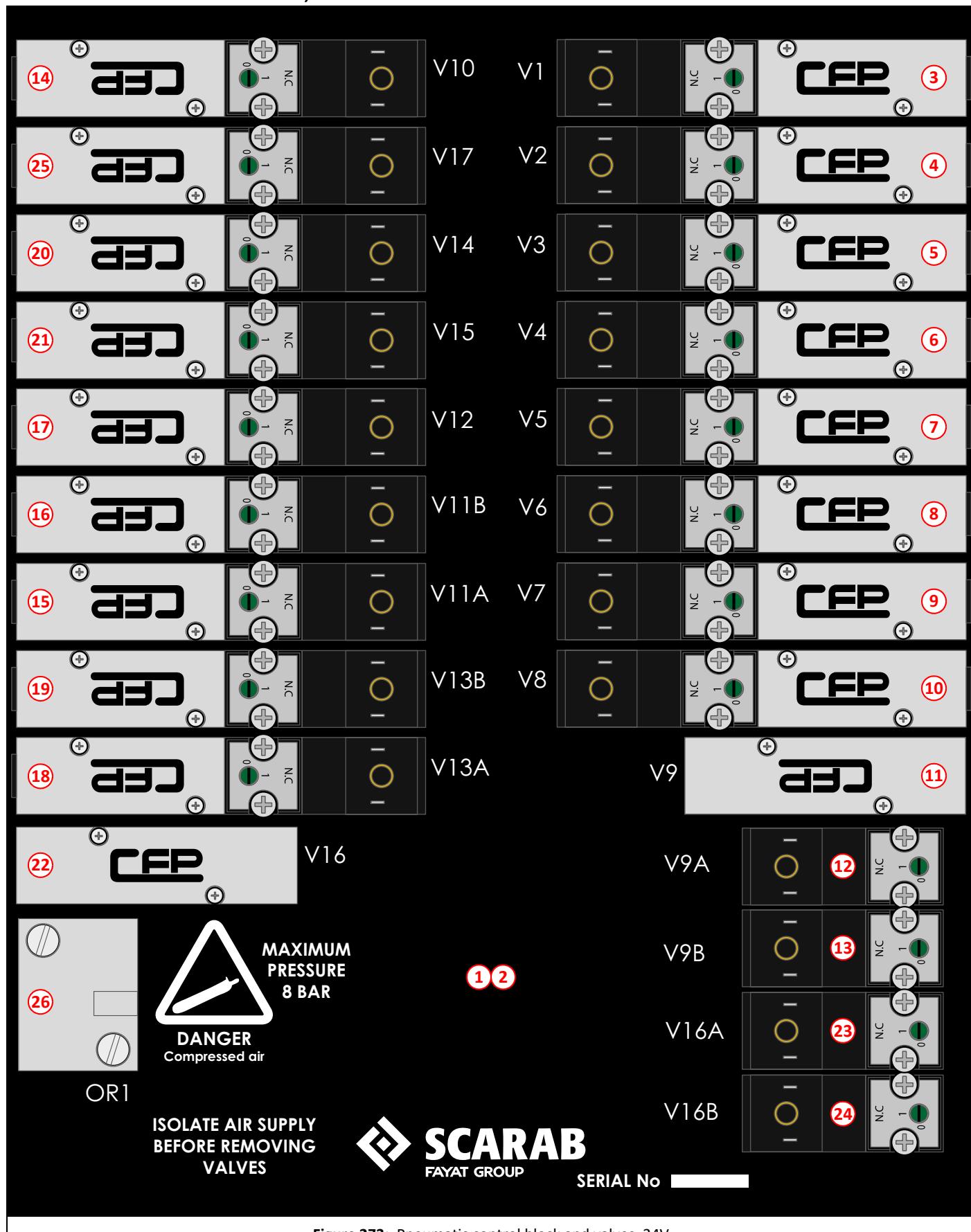


Figure 273: Pneumatic control block and valves, 24V

| Item | Part No | Qty | Description   |  |
|------|---------|-----|---|--|
| ①    | 045293  | 1   | Pneumatic control block (HAF), populated, 24V                                       |  |
| ②    | 045474  | 1   | Pneumatic control block (HAF), bare   |  |
| ③    | 045385  | 1   | V1 - 5/2 HT solenoid & spring valve 24V, LH side brush in/out                       |  |
| ④    | 045385  | 1   | V2 - 5/2 HT solenoid & spring valve 24V, LH suction nozzle lift/lower               |  |
| ⑤    | 045385  | 1   | V3 - 5/2 HT solenoid & spring valve 24V, LH auto blanking flap open/close           |  |
| ⑥    | 045385  | 1   | V4 - 5/2 HT solenoid & spring valve 24V, RH auto blanking flap open/close           |  |
| ⑦    | 045385  | 1   | V5 - 5/2 HT solenoid & spring valve 24V, RH suction nozzle open/close               |  |
| ⑧    | 045385  | 1   | V6 - 5/2 HT solenoid & spring valve 24V, RH side brush in/out                       |  |
| ⑨    | 045385  | 1   | V7 - 5/2 HT solenoid & spring valve 24V, central brush (wide sweep) swivel/slew     |  |
| ⑩    | 045385  | 1   | V8 - 5/2 HT solenoid & spring valve 24V, rear boom flap                             |  |
| ⑪    | 045383  | 1   | V9 - 5/2 HT pilot/pilot valve, full pressure side brush                             |  |
| ⑫    | 045381  | 1   | V9A - 5/2 HT 15mm solenoid 24V, full pressure side brush down                       |  |
| ⑬    | 045381  | 1   | V9B - 5/2 HT 15mm solenoid 24V, full pressure side brush up                         |  |
| ⑭    | 045385  | 1   | V10 - 5/2 HT solenoid & spring valve 24V, hopper prop                               |  |
| ⑮    | 045385  | 1   | V11A - 5/2 HT solenoid & spring valve 24V, side brush pressure up                   |  |
| ⑯    | 045385  | 1   | V11B - 5/2 HT solenoid & spring valve 24V, side brush pressure down                 |  |
| ⑰    | 045385  | 1   | V12 - 5/2 HT solenoid & spring valve 24V, central brush (wide sweep) lift/lower     |  |
| ⑱    | 045385  | 1   | V13A - 5/2 HT solenoid & spring valve 24V, central brush (wide sweep) up pressure   |  |
| ⑲    | 045385  | 1   | V13B - 5/2 HT solenoid & spring valve 24V, central brush (wide sweep) down pressure |  |
| ⑳    | 045385  | 1   | V14 - 5/2 HT solenoid & spring valve 24V, auxiliary brush slide out                 |  |
| ㉑    | 045385  | 1   | V15 - 5/2 HT solenoid & spring valve 24V, auxiliary brush lower                     |  |
| ㉒    | 045384  | 1   | V16 - 5/3 HT pilot/pilot valve, air operated rear boom                              |  |
| ㉓    | 045381  | 1   | V16A - 5/2 HT 15mm solenoid 24V, air operated rear boom raise                       |  |
| ㉔    | 045381  | 1   | V16B - 5/2 HT 15mm solenoid 24V, air operated rear boom lower                       |  |
| ㉕    | 045385  | 1   | V17 - 5/2 HT solenoid/spring valve 24V, auxiliary brush swing in/out                |  |
| ㉖    | 032710  | 1   | OR1 - OR gate valve   |  |

## 5/2 HT spring valve body and 15mm HT solenoid valve

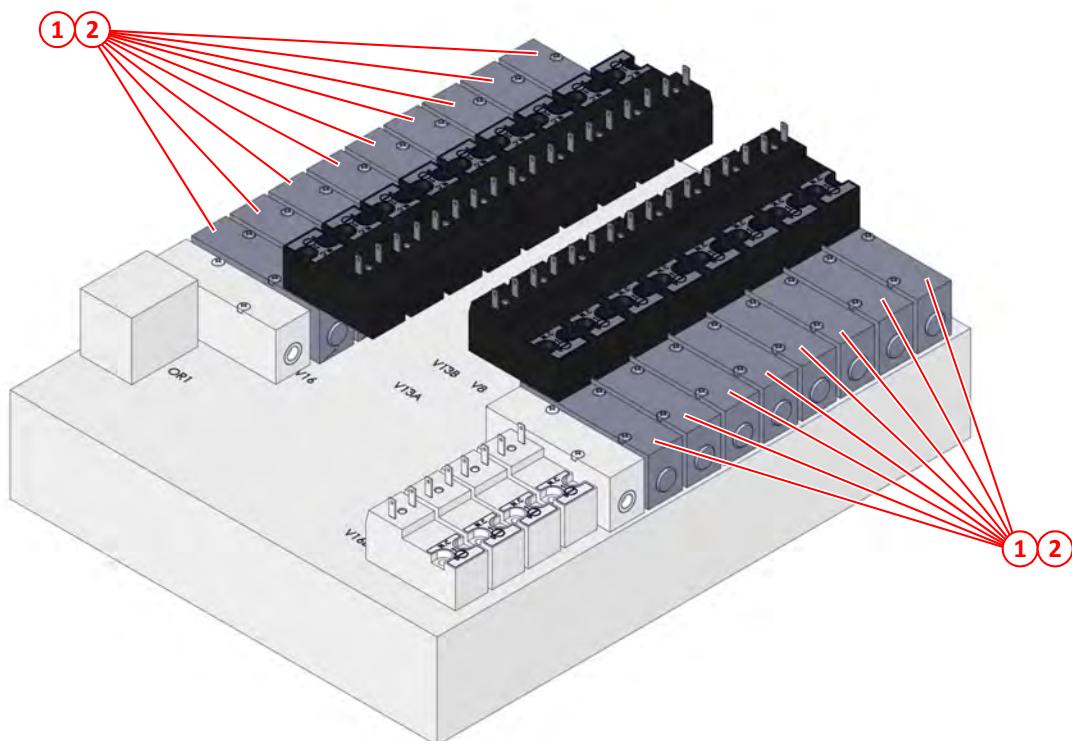
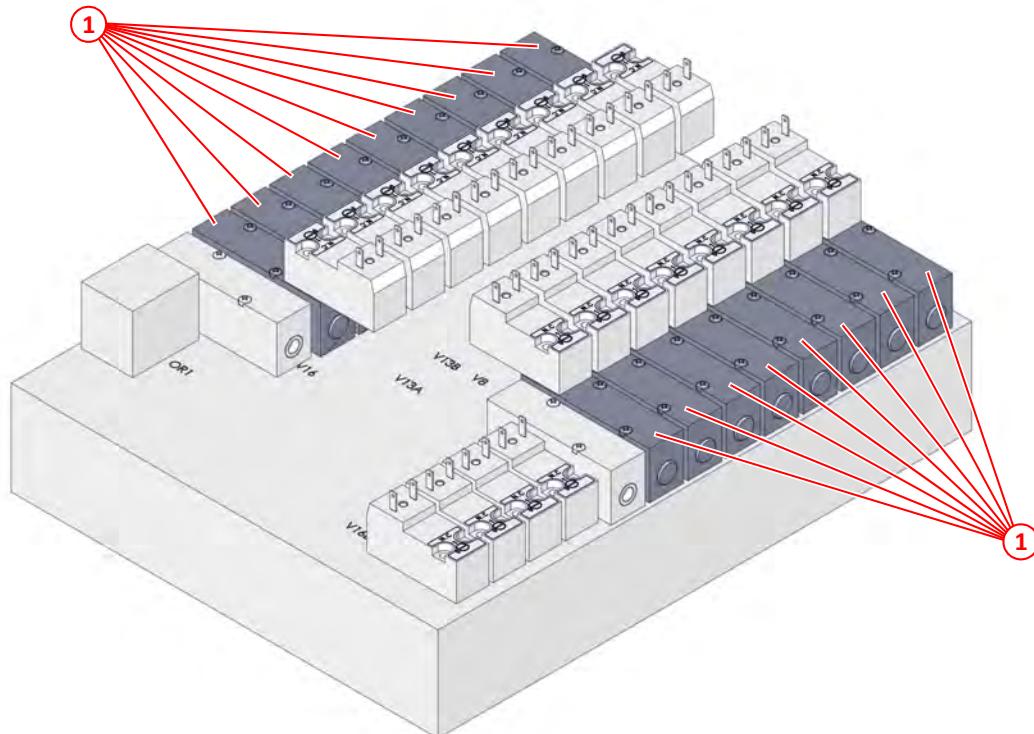


Figure 274: 5/2 HT spring valve body and 15mm HT solenoid valve

| Item | Part No | Qty | Description  |  |
|------|---------|-----|--|--|
| ①    | 045406  | 17  | 5/2 HT spring valve body and 15mm HT solenoid valve, 12V |  |
| ②    | 045385  | 17  | 5/2 HT spring valve body and 15mm HT solenoid valve, 24V |  |

**5/2 HT spring valve body**


**Figure 275:** 5/2 HT spring valve body

| Item | Part No | Qty | Description              |  |
|------|---------|-----|--------------------------|--|
| ①    | 045386  | 17  | 5/2 HT spring valve body |  |

## 15mm HT solenoid valve,

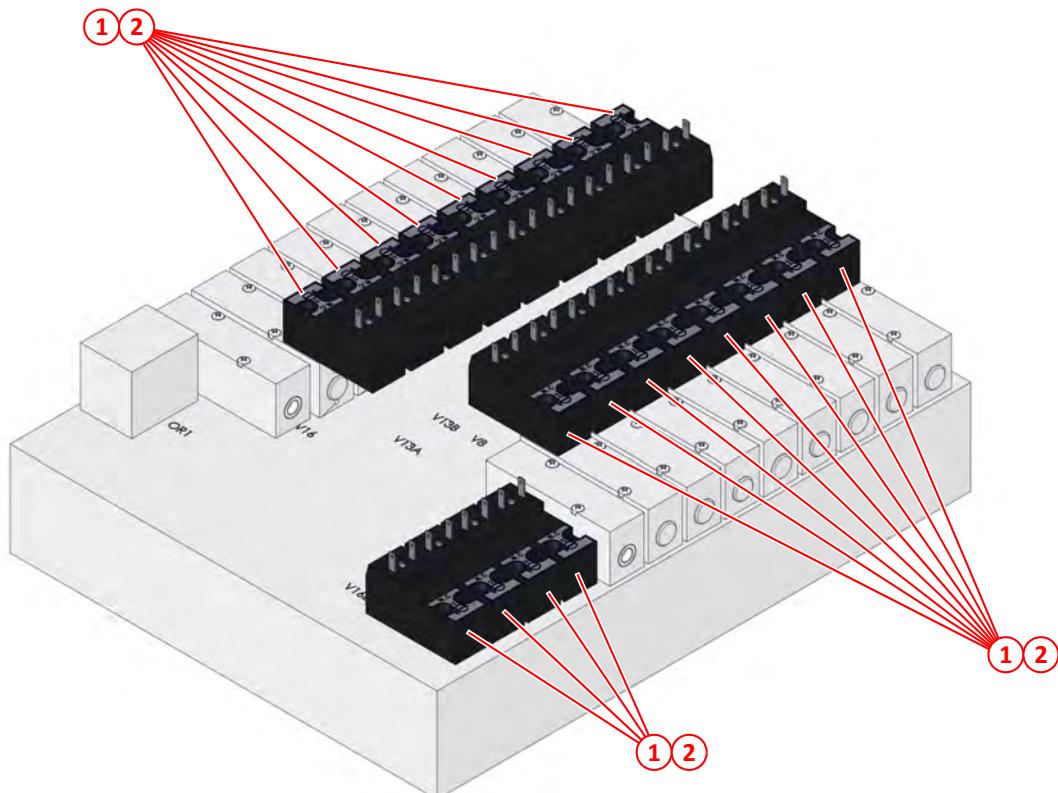
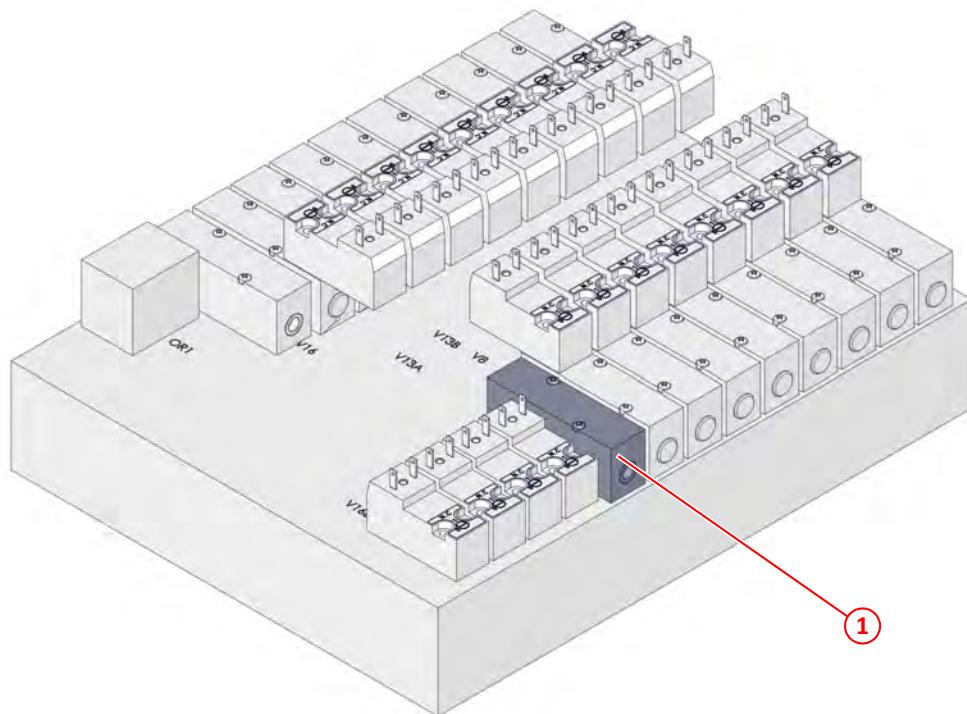


Figure 276: 15mm HT solenoid valve

| Item | Part No | Qty | Description                 |  |
|------|---------|-----|-----------------------------|--|
| ①    | 045382  | 21  | 15mm HT solenoid valve, 12V |  |
| ②    | 045381  | 21  | 15mm HT solenoid valve, 24V |  |

**5/2 pilot/pilot HT valve**


**Figure 277:** 5/2 pilot/pilot HT valve

| Item | Part No | Qty | Description              | File |
|------|---------|-----|--------------------------|------|
| ①    | 045383  | 1   | 5/2 pilot/pilot HT valve |      |

## 5/3 pilot/pilot HT valve

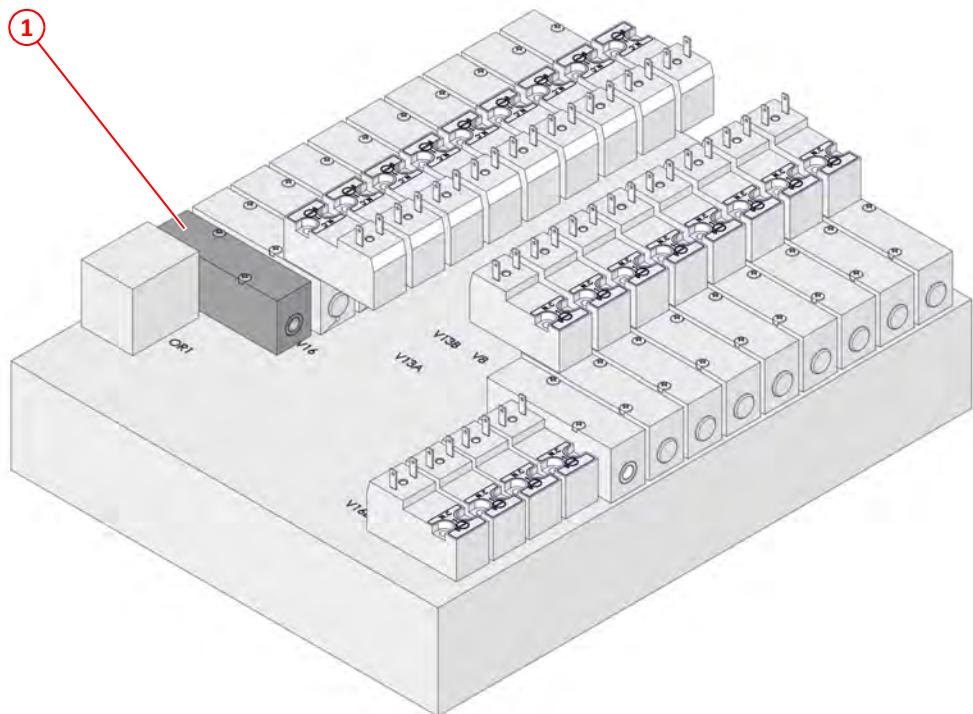


Figure 278: 5/2 pilot/pilot HT valve

| Item | Part No | Qty | Description              |  |
|------|---------|-----|--------------------------|--|
| ①    | 045384  | 1   | 5/3 pilot/pilot HT valve |  |

## Valve, OR gate

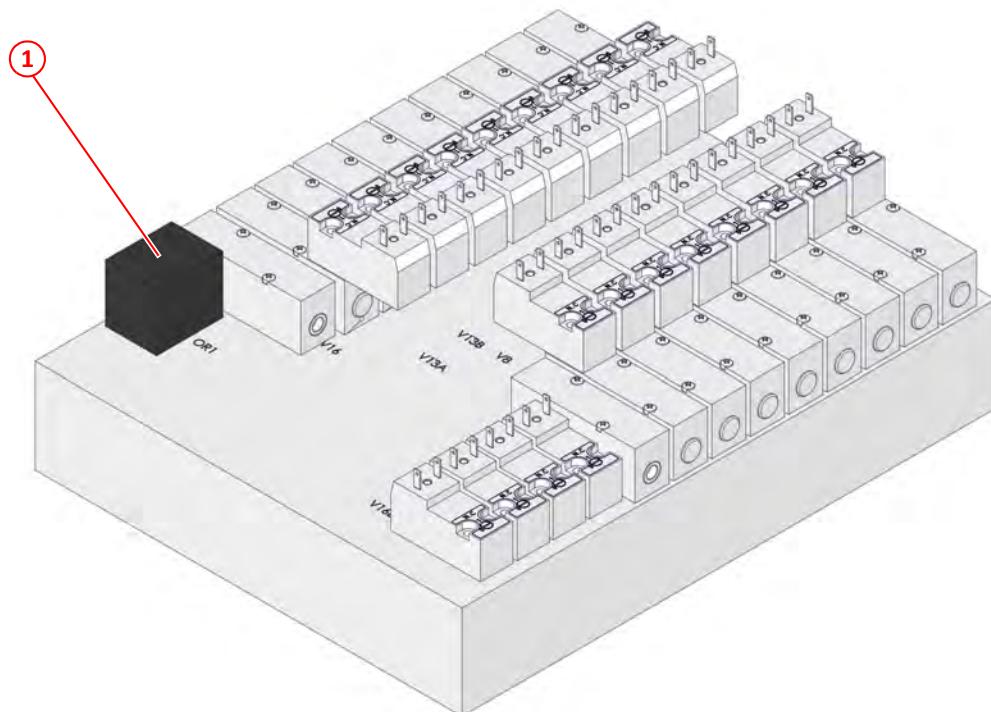


Figure 279: Valve, OR gate, high temperature

| Item | Part No | Qty | Description    |  |
|------|---------|-----|----------------|--|
| ①    | 032710  | 1   | Valve, OR gate |  |

## Seals and gaskets

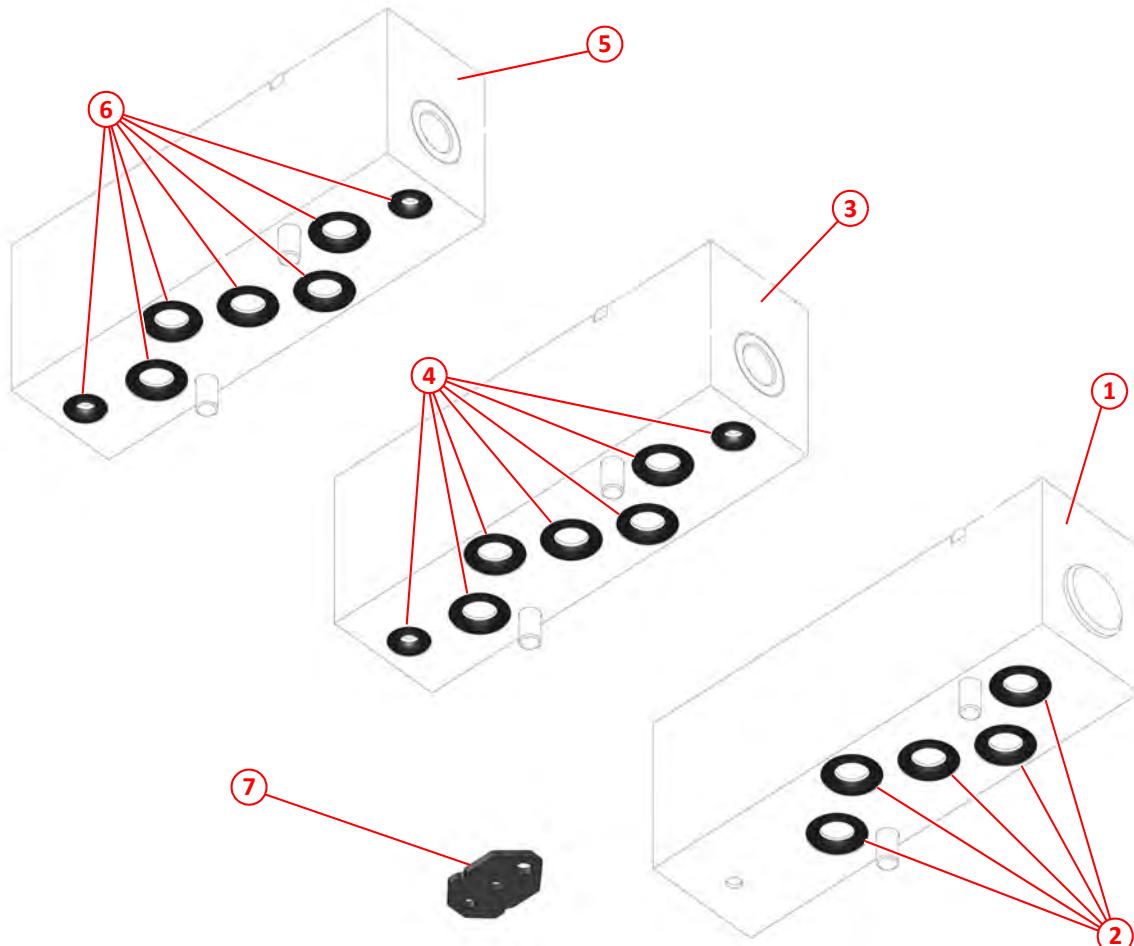
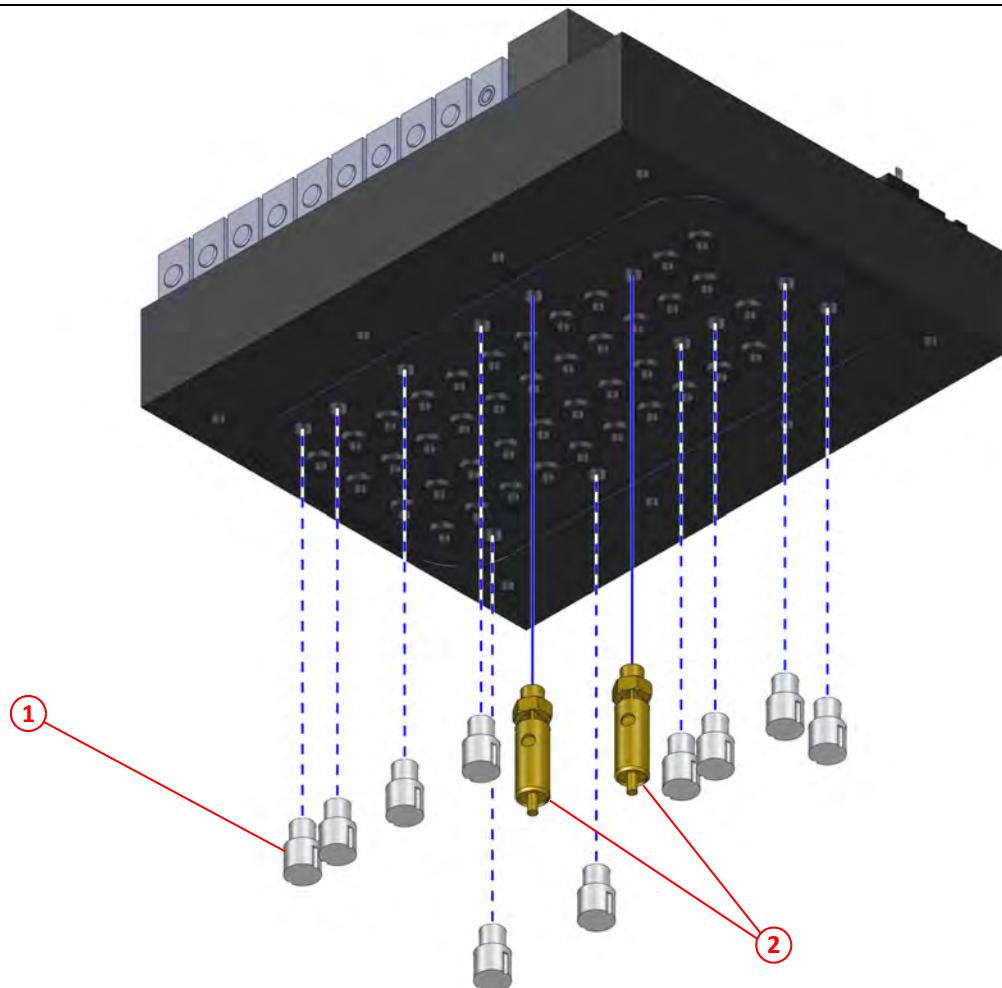


Figure 280: Seals and gaskets

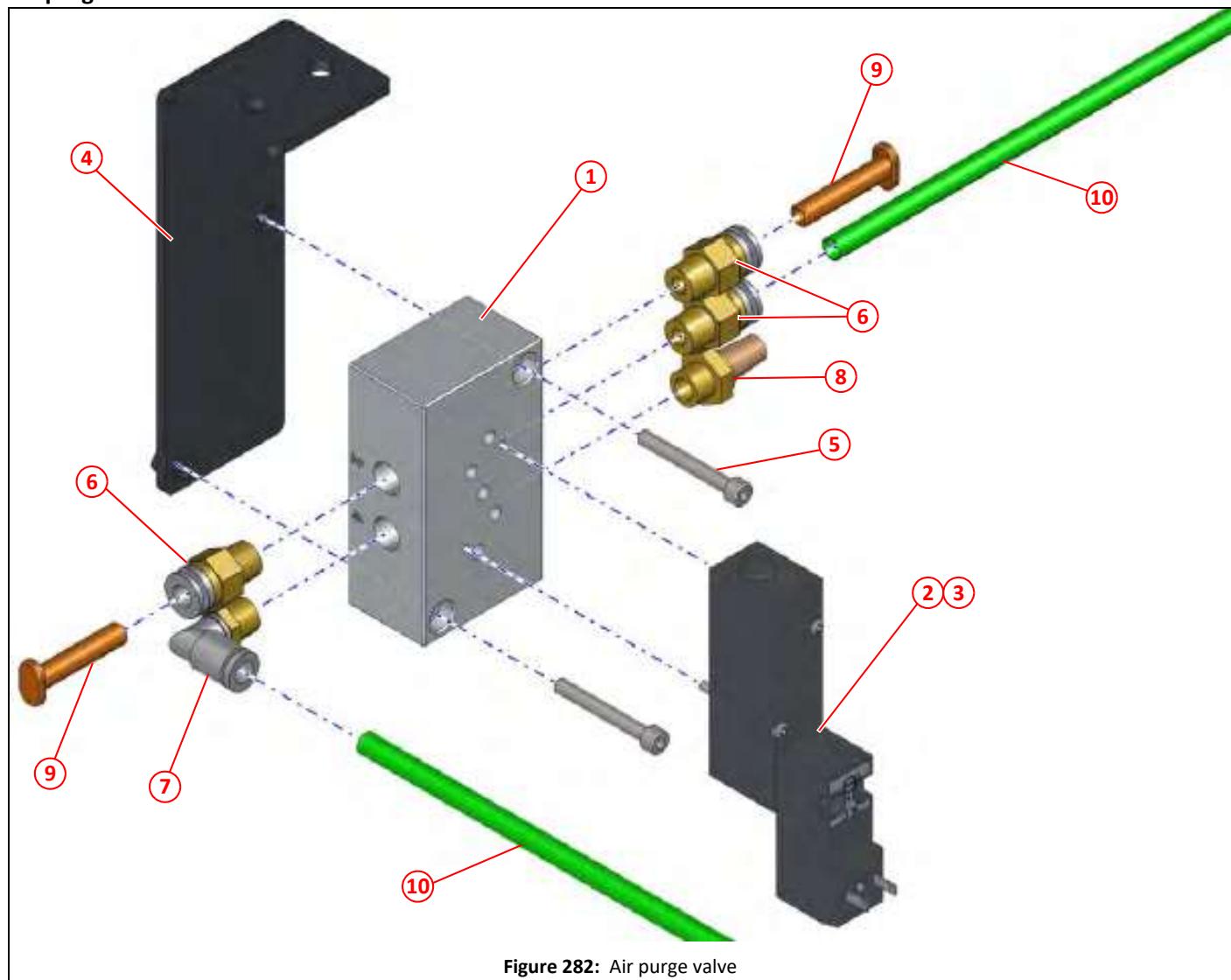
| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| ①    | 045386  | 17  | 5/2 HT spring valve body  | 317 |
| ②    | 045388  | 1   | Seal kit for item ①, contains 5 of $\phi 4 \times \phi 1.5$ o-rings                                 |     |
| ③    | 045383  | 1   | 5/2 pilot/pilot HT valve  | 319 |
| ④    | 045389  | 1   | Seal kit for item ③, contains 5 of $\phi 4 \times \phi 1.5$ & 2 of $\phi 2 \times \phi 1.5$ o-rings |     |
| ⑤    | 045384  | 1   | 5/3 pilot/pilot HT valve  | 320 |
| ⑥    | 045390  | 1   | Seal kit for item ⑤, contains 5 of $\phi 4 \times \phi 1.5$ & 2 of $\phi 2 \times \phi 1.5$ o-rings |     |
| ⑦    | 045387  | 1   | Spare pilot solenoid gasket   |     |

**Breather and relief valves**


**Figure 281:** Breather and relief valves

| Item | Part No | Qty | Description                 |  |
|------|---------|-----|-----------------------------|--|
| ①    | 006067  | 11  | 1/8" one way breather valve |  |
| ②    | 032709  | 2   | Relief valve                |  |

## Air purge valve



| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 047447  | 1   | Air valve base plate, HAFNER                               |
| ②    | 045406  | 1   | 5/2 HT spring valve body and 15mm HT solenoid valve, 12V   |
| ③    | 045385  | 1   | 5/2 HT spring valve body and 15mm HT solenoid valve, 24V   |
| ④    | 047811  | 1   | Bracket, air purge valve                                   |
| ⑤    | 000525  | 2   | Socket cap head screw M4 x 30 BZP                          |
| ⑥    | 024643  | 3   | Straight connector, $\frac{1}{8}$ " BSP x Ø6 push in, grey |
| ⑦    | 024645  | 1   | Elbow, $\frac{1}{8}$ " BSP x Ø6 push in, grey              |
| ⑧    | 006006  | 1   | Muffler $\frac{1}{8}$ " BSP, NORGREN                       |
| ⑨    | 026085  | 2   | Plug Ø6mm  |
| ⑩    | 024650  | 2   | Ø6mm green air pipe, cut to length as required             |

## Pressure regulator valve and gauge, central brush (wide sweep)

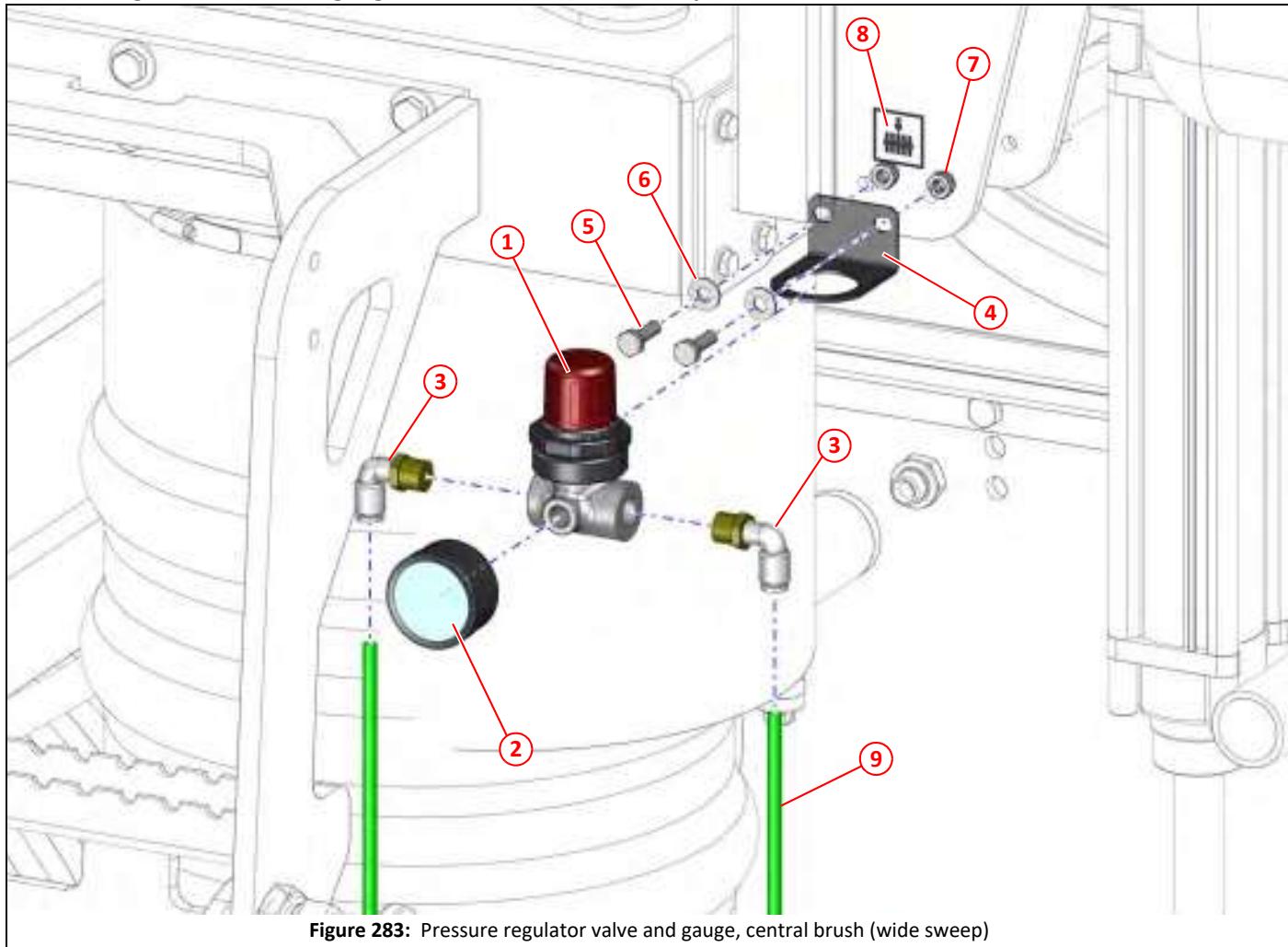
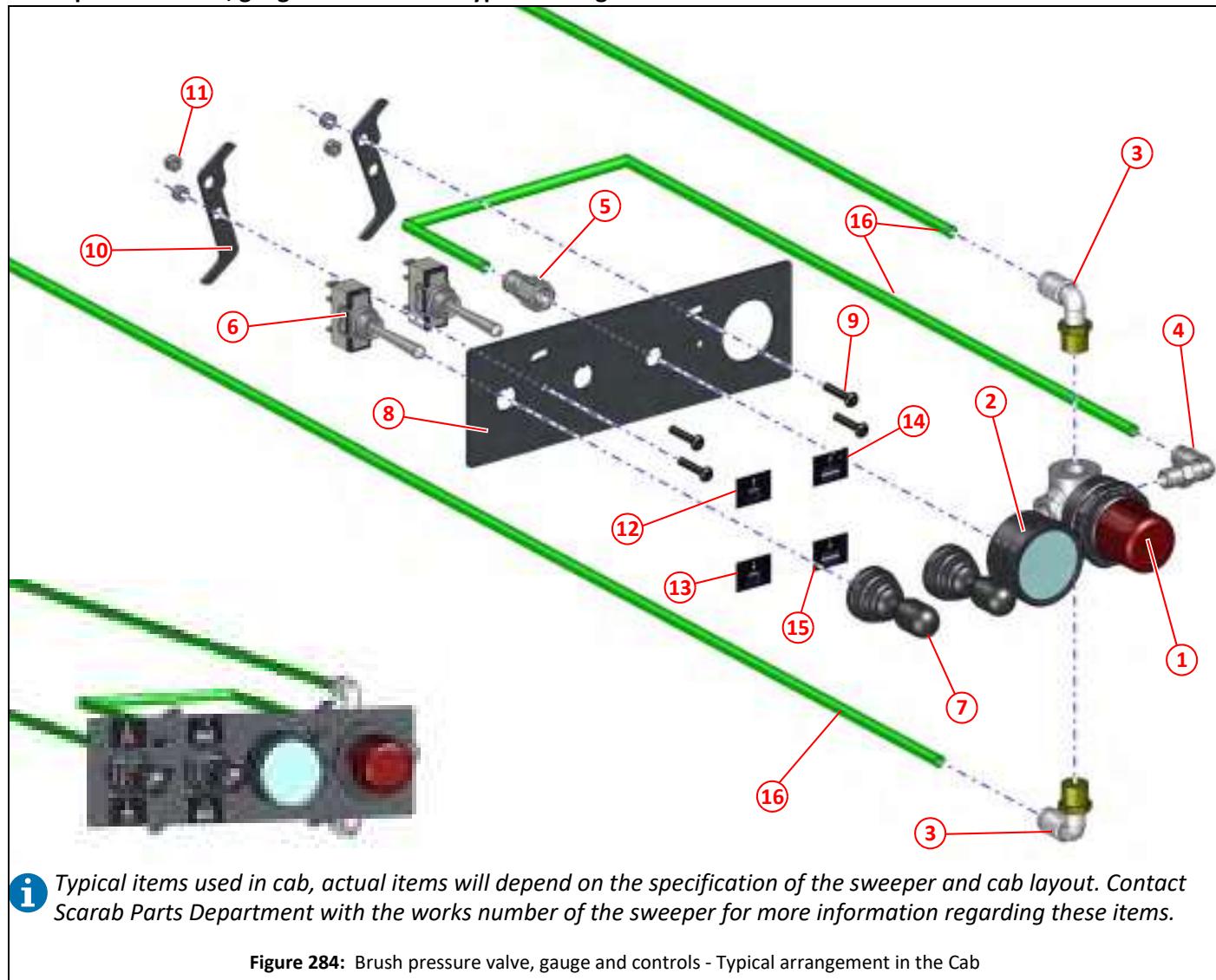


Figure 283: Pressure regulator valve and gauge, central brush (wide sweep)

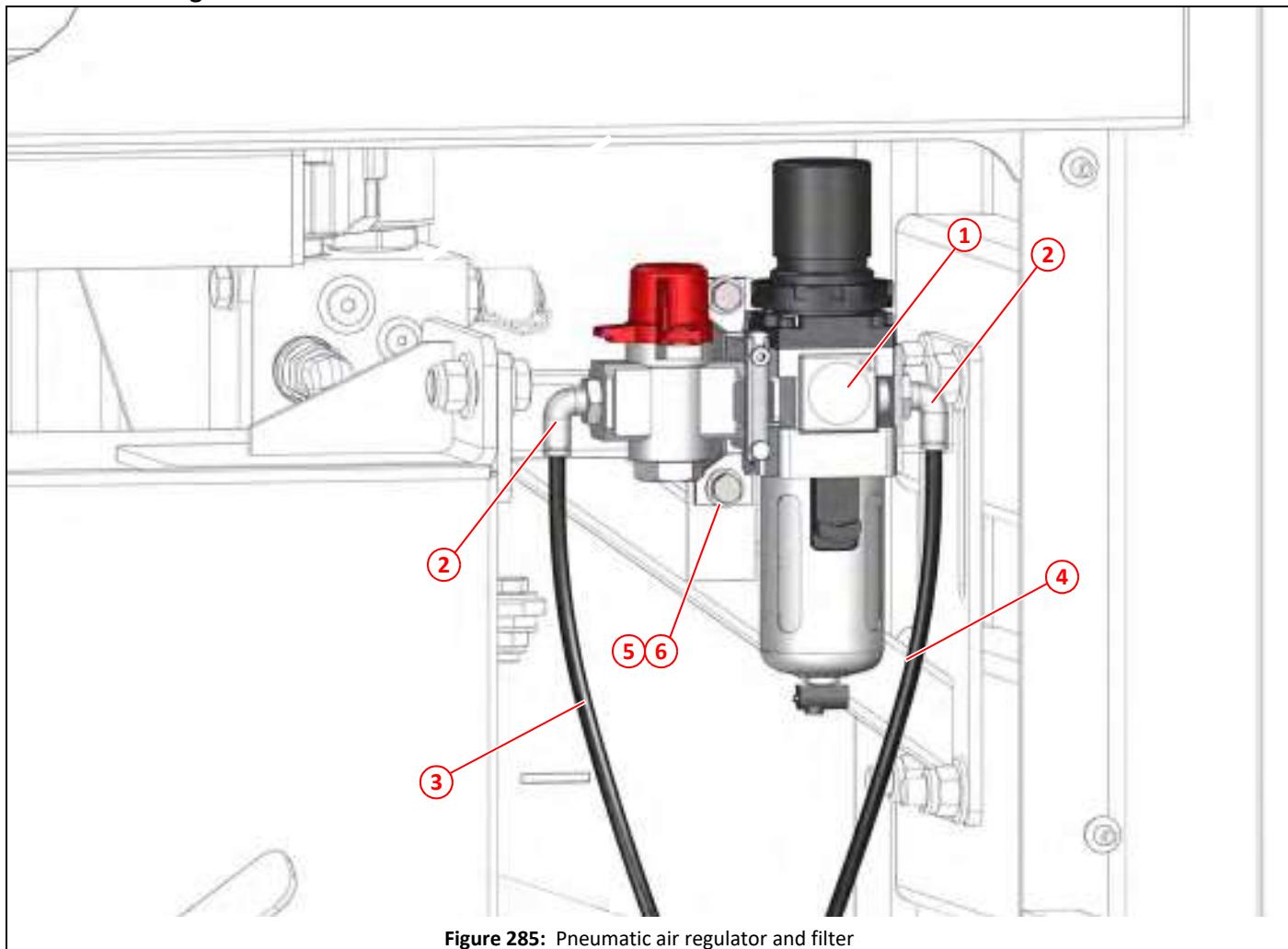
| Item | Part No | Qty | Description                                      |
|------|---------|-----|--|
| ①    | 023242  | 1   | Mini pressure regulator 0.5 - 3.5bar             |
| ②    | 023246  | 1   | Pressure gauge 0-10bar                           |
| ③    | 024646  | 2   | Elbow, swivel, $\frac{1}{4}$ " BSP x ø6 push in  |
| ④    | 023245  | 1   | Bracket, mini regulator                          |
| ⑤    | 011067  | 2   | Setscrew M6 x 20                                 |
| ⑥    | 011090  | 2   | Washer M6  |
| ⑦    | 011071  | 1   | Nyloc nut T M6                                   |
| ⑧    | 039549  | 1   | Label - Central brush (wide sweep) pressure down |
| ⑨    | 024650  | 2   | ø6mm green air pipe, cut to length as required   |

|        |   |  |
|--------|---|--|
| 040112 | 1 | Air regulator brush pressure assembly, includes items ①, ②, ③, and ④ |
|--------|---|--|

## Brush pressure valve, gauge and controls - Typical arrangement in the Cab



| Item | Part No | Qty | Description                                      |
|------|---------|-----|--|
| ①    | 023242  | 1   | Mini pressure regulator 0.5 - 3.5bar             |
| ②    | 023246  | 1   | Pressure gauge 0-10bar                           |
| ③    | 024646  | 2   | Elbow, swivel, $\frac{1}{4}$ " BSP x Ø6 push in  |
| ④    | 006007  | 1   | Elbow, $\frac{1}{8}$ " BSP x Ø6 push in          |
| ⑤    | 006032  | 1   | Adapter, $\frac{1}{8}$ " BSP x Ø6 push in        |
| ⑥    | 037248  | 2   | Toggle switch on/off/on                          |
| ⑦    | 037247  | 2   | Rubber boot for toggle switch                    |
| ⑧    | 046628  | 1   | Universal air regulator plate                    |
| ⑨    | 000515  | 4   | Socket button head set screw HD M4 x 20 black    |
| ⑩    | 046615  | 2   | Clamp arm for universal air regulator plate      |
| ⑪    | 000134  | 4   | Nyloc nut T M4                                   |
| ⑫    | 038117  | 1   | Label - Side brush up pressure                   |
| ⑬    | 038118  | 1   | Label - Side brush down pressure                 |
| ⑭    | 038119  | 1   | Label - Central brush (wide sweep) up pressure   |
| ⑮    | 038120  | 1   | Label - Central brush (wide sweep) down pressure |
| ⑯    | 024650  | 3   | Ø6mm green air pipe, cut to length as required   |

**Pneumatic air regulator and filter**

**Figure 285:** Pneumatic air regulator and filter

| Item | Part No | Qty | Description  |  |
|------|---------|-----|--|--|
| ①    | 032519  | 1   | Air regulator and filter   |  |
| ②    | 023203  | 2   | Push in swivel elbow, Ø6 x $\frac{1}{4}$ " BSP                                   |  |
| ③    | 014572  | 1   | Air pipe, black, Ø6, main feed from chassis unit, cut to length as required      |  |
| ④    | 014572  | 1   | Air pipe, black, Ø6, to pneumatic valve block Port 35, cut to length as required |  |
| ⑤    | 011067  | 2   | Setscrew HT M6 x 20  |  |
| ⑥    | 011090  | 2   | Washer M6  |  |

## Pneumatic cylinder, central brush (wide sweep) raise/lower

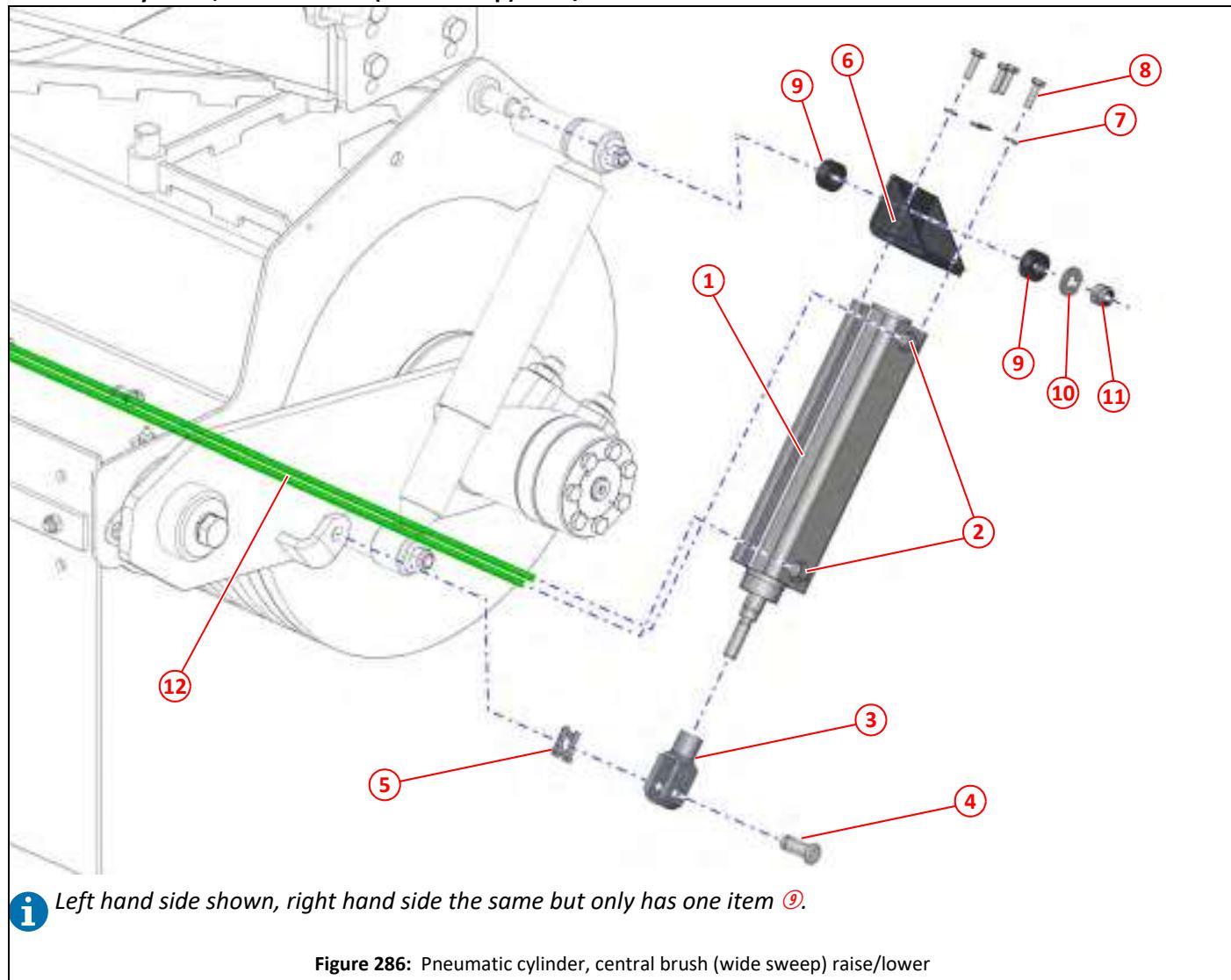
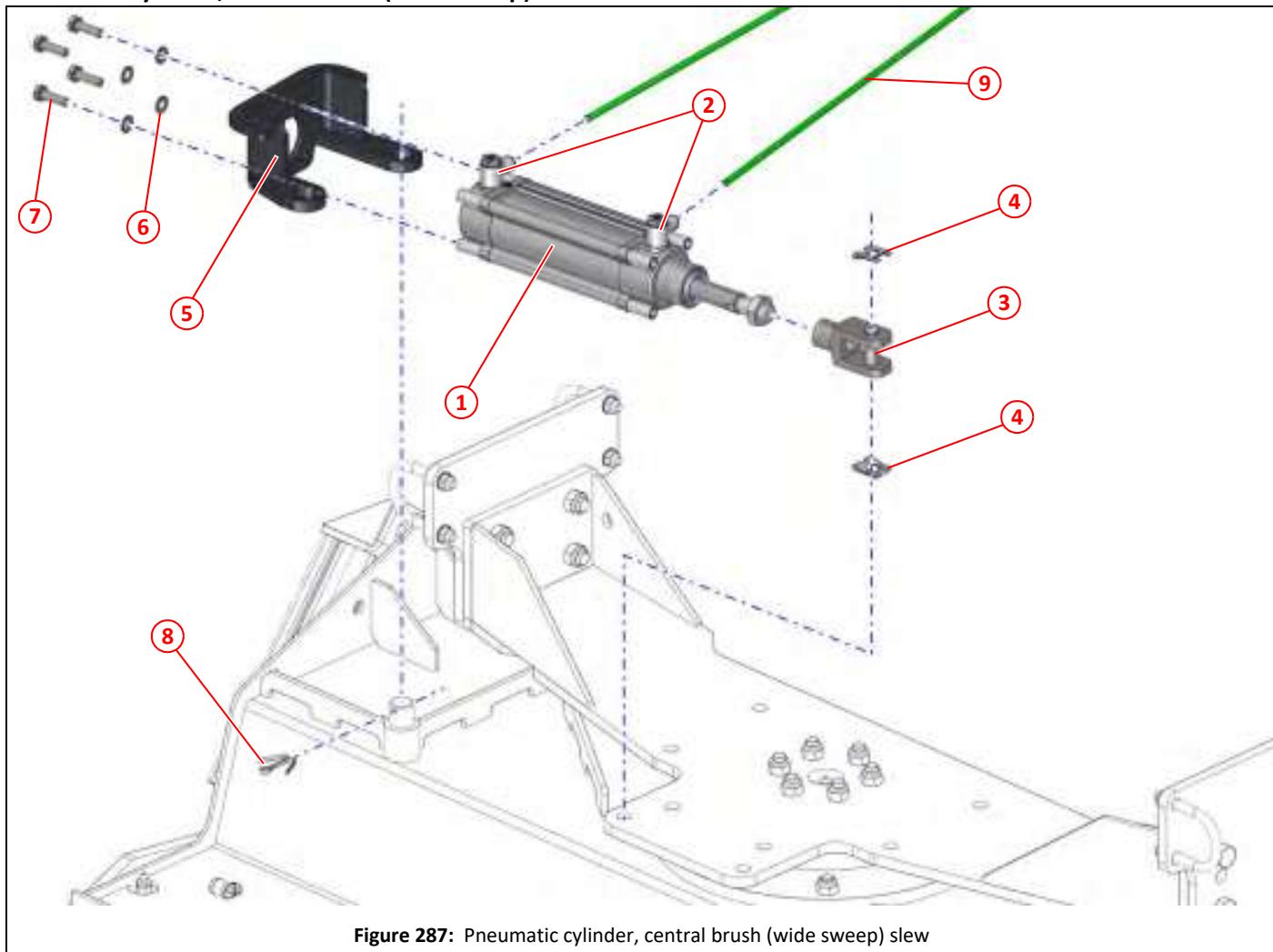


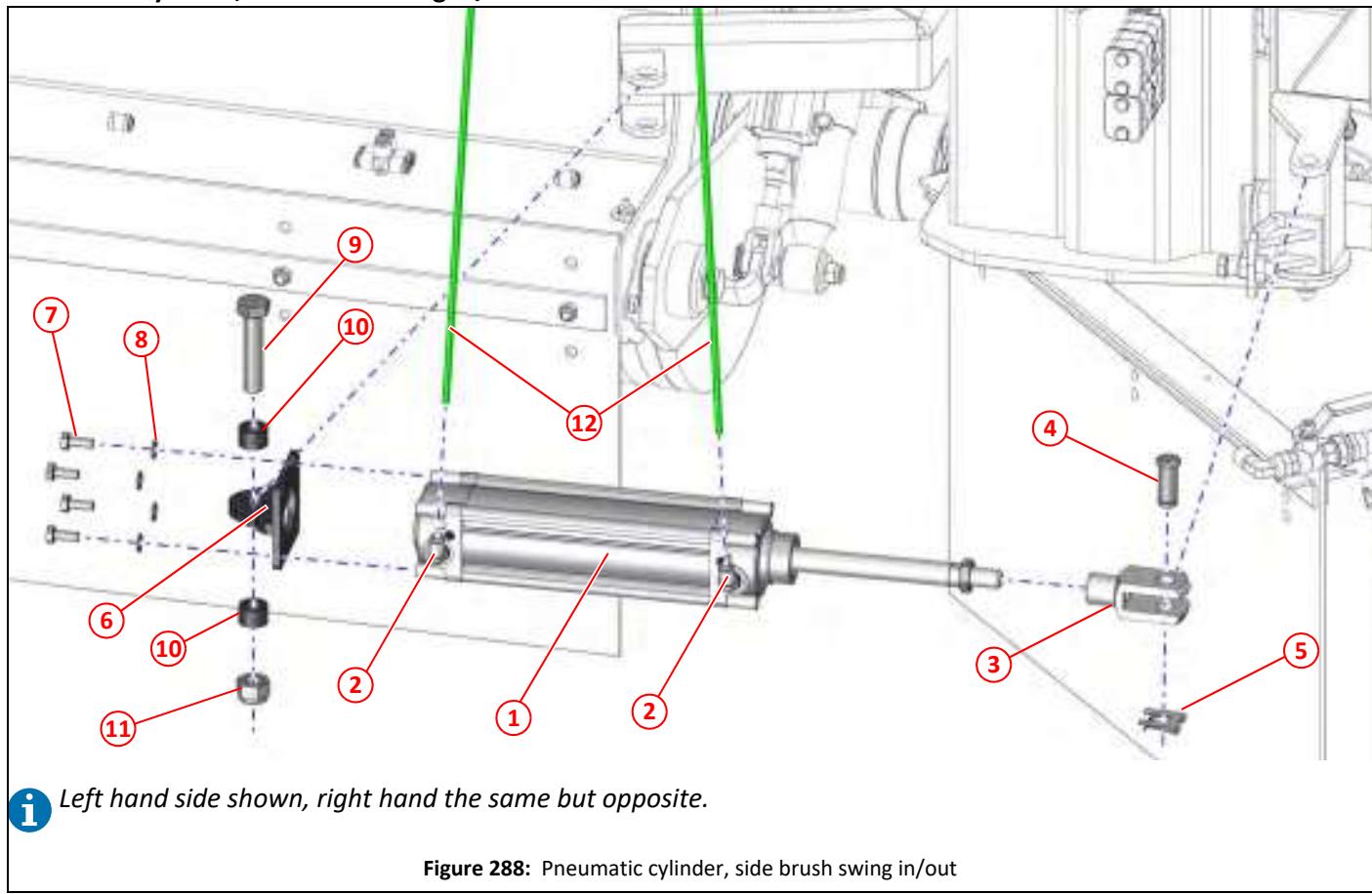
Figure 286: Pneumatic cylinder, central brush (wide sweep) raise/lower

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 020602  | 1   | Pneumatic cylinder ø40 x 125  |
| ②    | 024646  | 2   | Elbow, $\frac{1}{4}$ " BSP x ø6 push in                               |
| ③    | 014469  | 1   | Clevis, pneumatic cylinder, M12                                       |
| ④    | 023270  | 1   | Clevis pin ø12  |
| ⑤    | 023269  | 1   | Safety fastener ø12   |
| ⑥    | 030532  | 1   | Bracket, pneumatic cylinder, central brush (wide sweep) raise/lower   |
| ⑦    | 011091  | 4   | Spring washer M6  |
| ⑧    | 011067  | 4   | Setscrew HT M6 x 20   |
| ⑨    | 011000  | 2   | Rubber bush cut from, hose $\frac{5}{8}$ " fuel SAE100R6, cut to 11mm |
| ⑩    | 011094  | 1   | Washer M10  |
| ⑪    | 011075  | 1   | Nyloc nut T M10   |
| ⑫    | 024650  | 2   | ø6mm green air pipe, cut to length as required                        |

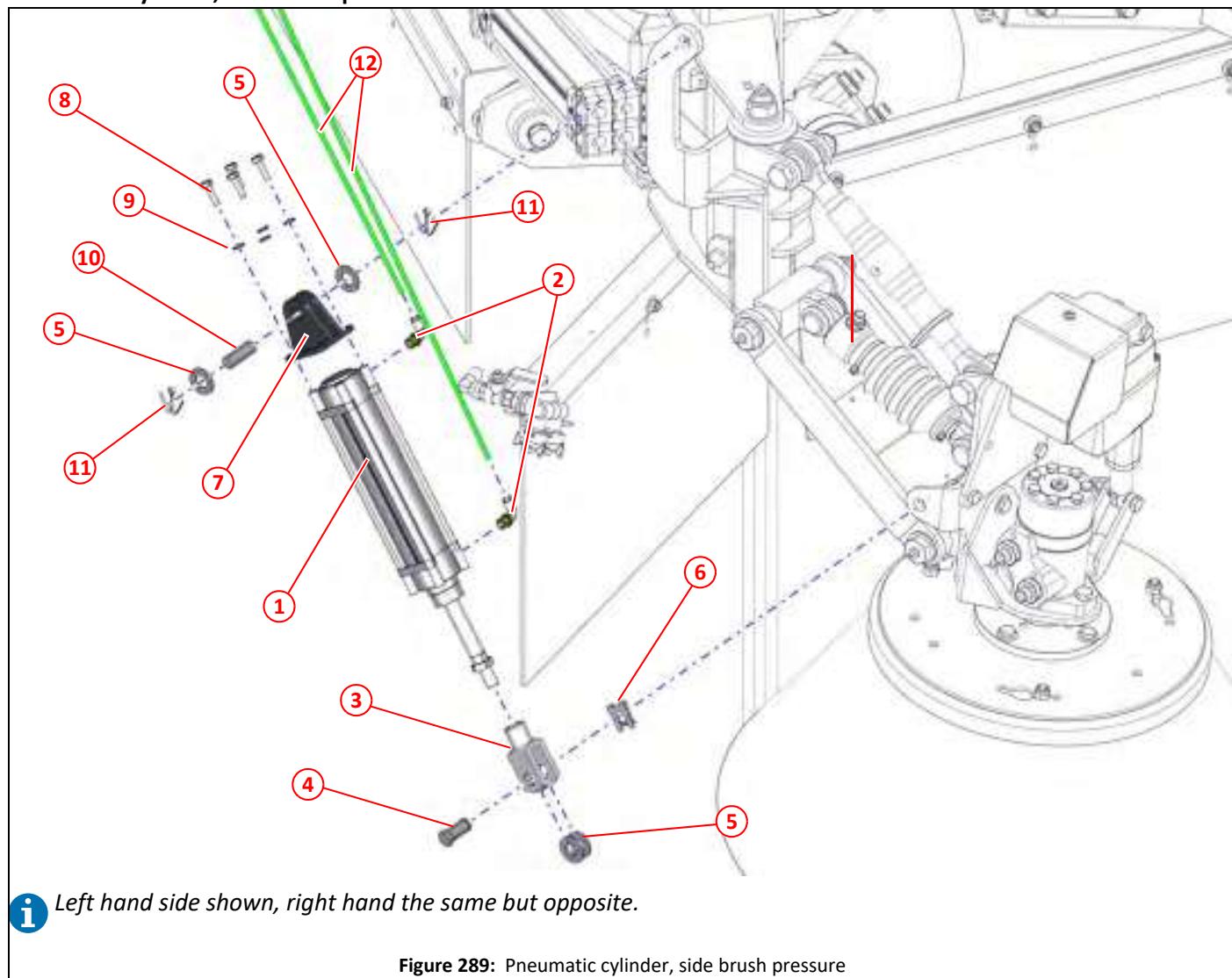
**Pneumatic cylinder, central brush (wide sweep) slew**

**Figure 287: Pneumatic cylinder, central brush (wide sweep) slew**

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 020767  | 1   | Pneumatic cylinder ø50 x 100                                 |
| ②    | 021158  | 2   | Pneumatic flow regulator                                     |
| ③    | 036621  | 1   | Clevis, special, M16 with ø12 pin                            |
| ④    | 023269  | 2   | Safety fastener ø12  |
| ⑤    | 036620  | 1   | Bracket, pneumatic cylinder, central brush (wide sweep) slew |
| ⑥    | 011093  | 4   | Spring washer M8   |
| ⑦    | 011011  | 4   | Setscrew HT M8   |
| ⑧    | 011122  | 1   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ "               |
| ⑨    | 024650  | 2   | ø6mm green air pipe, cut to length as required               |

## Pneumatic cylinder, side brush swing in/out

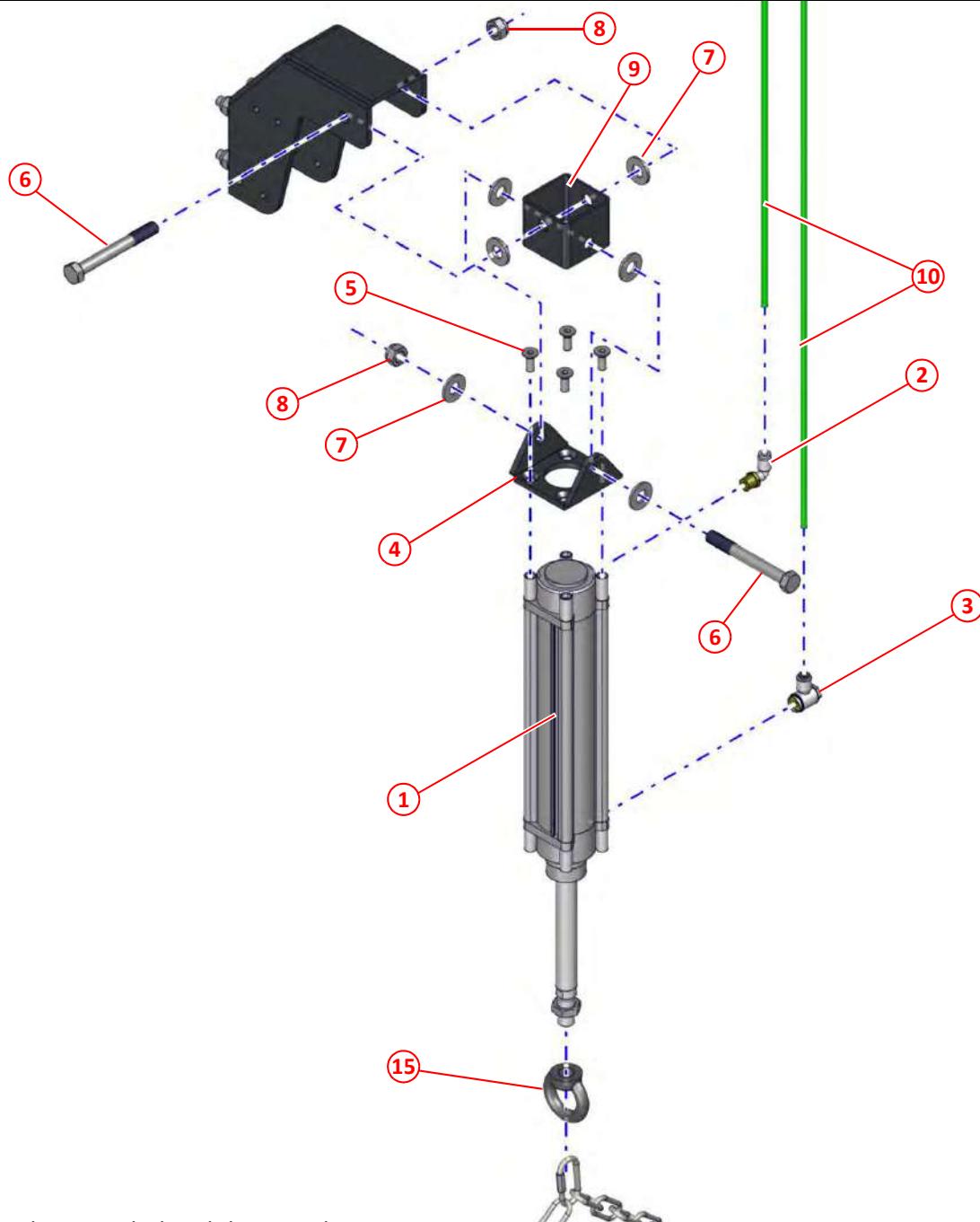


| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 028306  | 1   | Pneumatic cylinder ø63 x 160  |
| ②    | 024646  | 2   | Elbow, $\frac{1}{4}$ " BSP x ø6 push in                               |
| ③    | 020299  | 1   | Clevis pneumatic M16 x 1.5  |
| ④    | 022673  | 1   | Clevis pin turned   |
| ⑤    | 022674  | 1   | Clip retaining M16  |
| ⑥    | 031052  | 1   | Ram end ø63   |
| ⑦    | 011010  | 4   | Setscrew HT M8 x 20   |
| ⑧    | 011093  | 4   | Spring washer M8  |
| ⑨    | 011260  | 1   | Bolt HT M16 x 70  |
| ⑩    | 011000  | 2   | Rubber bush cut from, hose $\frac{5}{8}$ " fuel SAE100R6, cut to 15mm |
| ⑪    | 011060  | 1   | Nyloc nut T M16   |
| ⑫    | 024650  | 2   | ø6mm green air pipe, cut to length as required                        |

**Pneumatic cylinder, side brush pressure**

**Figure 289: Pneumatic cylinder, side brush pressure**

| Item | Part No | Qty | Description                                    |
|------|---------|-----|--|
| ①    | 020298  | 1   | Pneumatic cylinder ø50 x 160                   |
| ②    | 024646  | 2   | Elbow, $\frac{1}{4}$ " BSP x ø6 push in        |
| ③    | 020299  | 1   | Clevis pneumatic M16 x 1.5                     |
| ④    | 022673  | 1   | Clevis pin turned                              |
| ⑤    | 011135  | 4   | Washer M16                                     |
| ⑥    | 022674  | 1   | Clip retaining M16                             |
| ⑦    | 023122  | 1   | Ram end, pivot, ø50                            |
| ⑧    | 011011  | 4   | Setscrew HT M8 x 25                            |
| ⑨    | 011093  | 4   | Spring washer M8                               |
| ⑩    | 023123  | 1   | Pin ø16 x 46                                   |
| ⑪    | 011122  | 2   | Split pin, $\frac{3}{16}$ " x $1\frac{1}{2}$ " |
| ⑫    | 024650  | 2   | ø6mm green air pipe, cut to length as required |

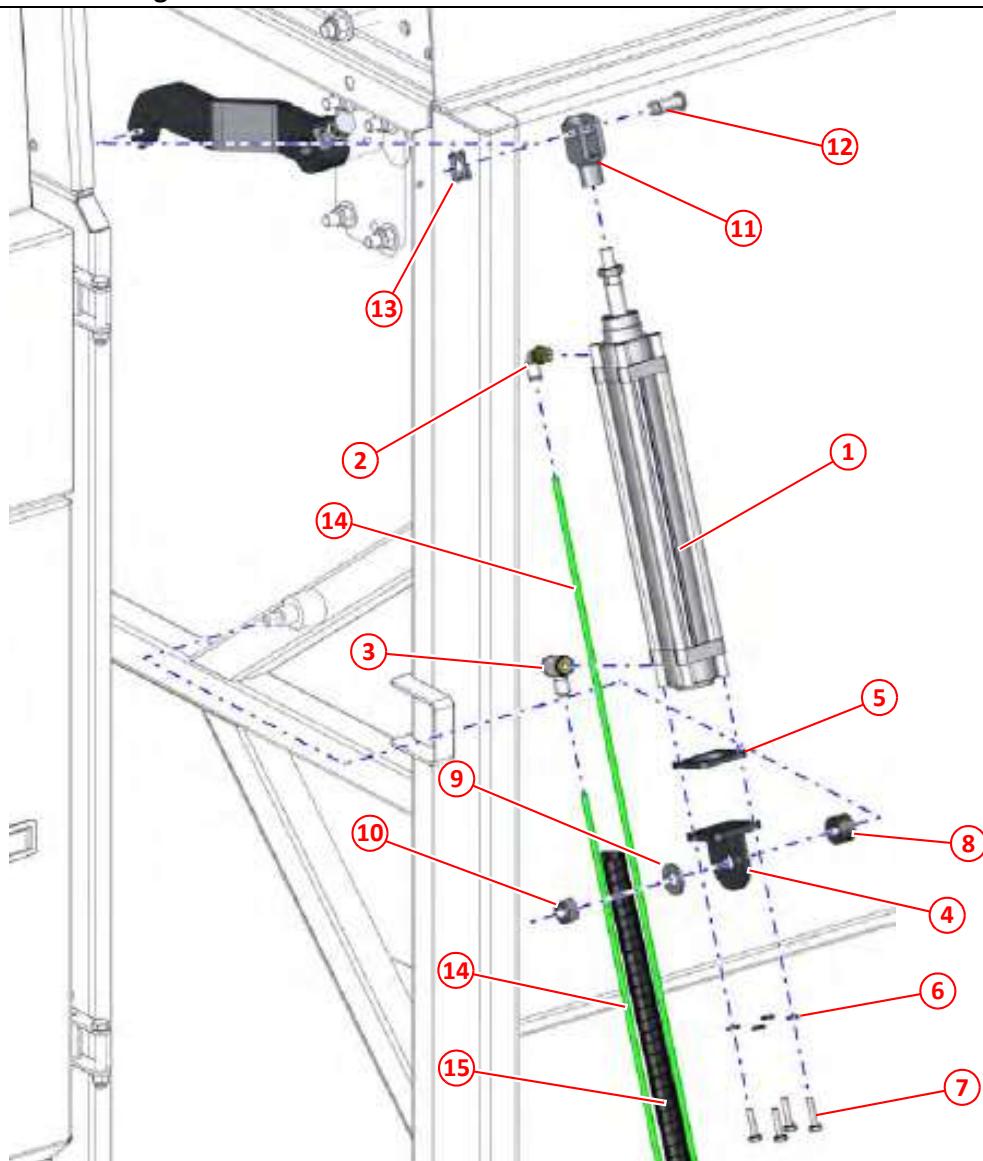
## Pneumatic cylinder, suction nozzle raise/lower



**i** Left hand side shown, right hand the same but opposite.

Figure 290: Pneumatic cylinder, suction nozzle raise/lower

| Item | Part No | Qty | Description                                    |  |
|------|---------|-----|--|--|
| ①    | 030772  | 1   | Pneumatic cylinder ø50 x 200                   |  |
| ②    | 024646  | 1   | Elbow, $\frac{1}{4}$ " BSP x ø6 push in        |  |
| ③    | 021158  | 1   | Pneumatic flow regulator                       |  |
| ④    | 030777  | 1   | Cylinder pivot, suction nozzle lift            |  |
| ⑤    | 000003  | 4   | Socket countersunk screw M8 x 20, plated       |  |
| ⑥    | 011057  | 2   | Bolt M12 x 100                                 |  |
| ⑦    | 011096  | 6   | Washer M12                                     |  |
| ⑧    | 011077  | 2   | Nyloc nut T M12                                |  |
| ⑨    | 030776  | 1   | Cylinder pivot (gimbal), suction nozzle lift   |  |
| ⑩    | 024650  | 2   | ø6mm green air pipe, cut to length as required |  |
| ⑯    | 032293  | 1   | Ring nut M16 x 1.5                             |  |

**Pneumatic cylinder, auto blanking**


**i** Left hand side shown, right hand the same but opposite.

Figure 291: Pneumatic cylinder, auto blanking

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 021467  | 1   | Pneumatic cylinder ø40 x 200  |
| ②    | 024646  | 1   | Elbow, $\frac{1}{4}$ " BSP x ø6 push in                               |
| ③    | 021158  | 1   | Pneumatic flow regulator  |
| ④    | 014457  | 1   | Cylinder pivot, auto blanking   |
| ⑤    | 045502  | 1   | Spacer, auto blanking cylinder  |
| ⑥    | 011091  | 4   | Spring washer M6  |
| ⑦    | 011087  | 4   | Setscrew HT M6 x 25   |
| ⑧    | 011000  | 1   | Rubber bush cut from, hose $\frac{5}{8}$ " fuel SAE100R6, cut to 15mm |
| ⑨    | 000277  | 1   | Washer M12, stainless steel   |
| ⑩    | 000275  | 1   | Nyloc nut T M12   |
| ⑪    | 014469  | 1   | Clevis, pneumatic M12.  |
| ⑫    | 023270  | 1   | Clevis pin ø12  |
| ⑬    | 023269  | 1   | Safety fastener ø12   |
| ⑭    | 024650  | 2   | ø6mm green air pipe, cut to length as required                        |
| ⑮    | 004210  | 1   | Flex cable conduit, split, ø21  |

## Pneumatic cylinder, hopper safety prop, kicker

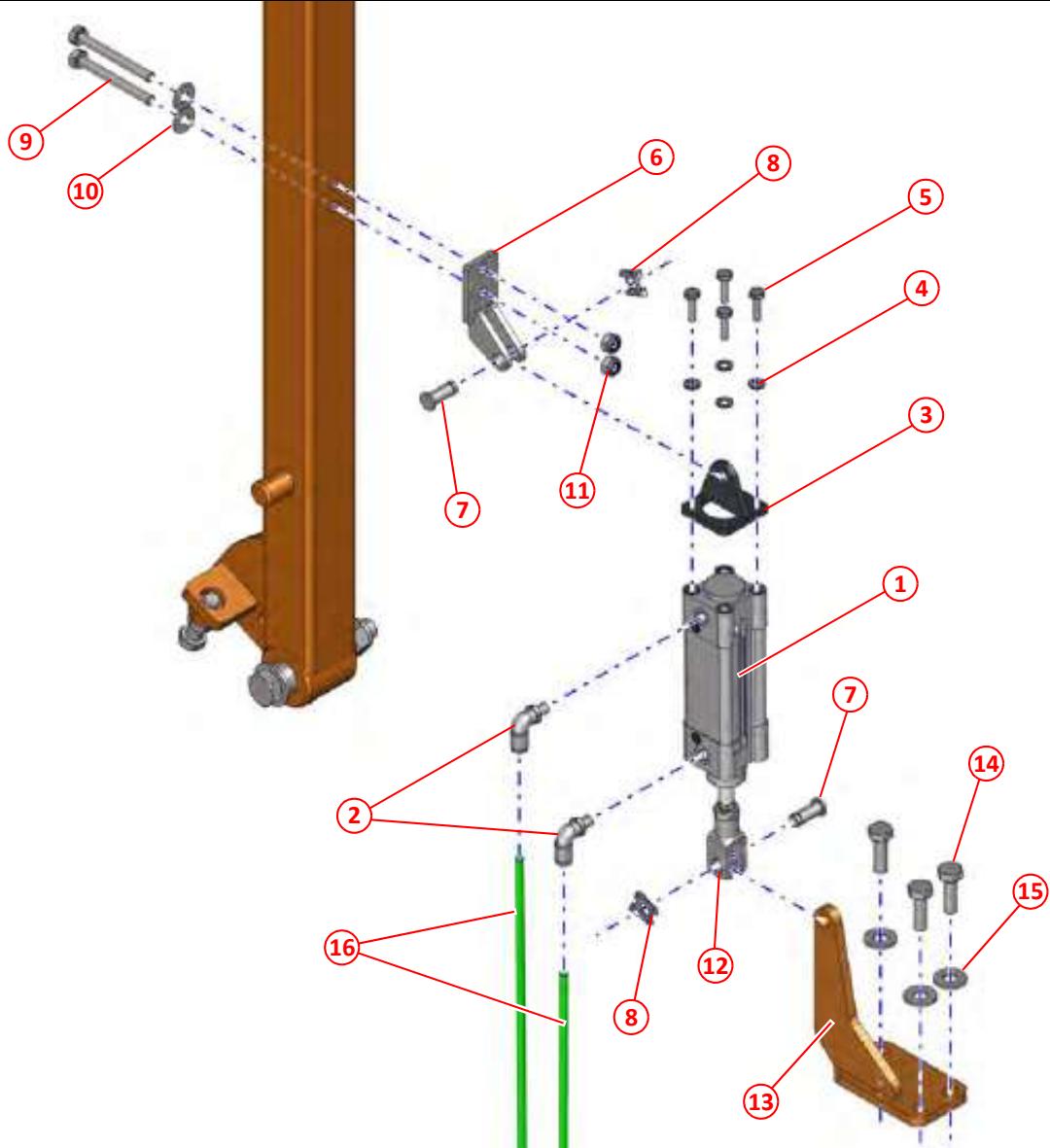


Figure 292: Pneumatic cylinder, hopper safety prop, kicker

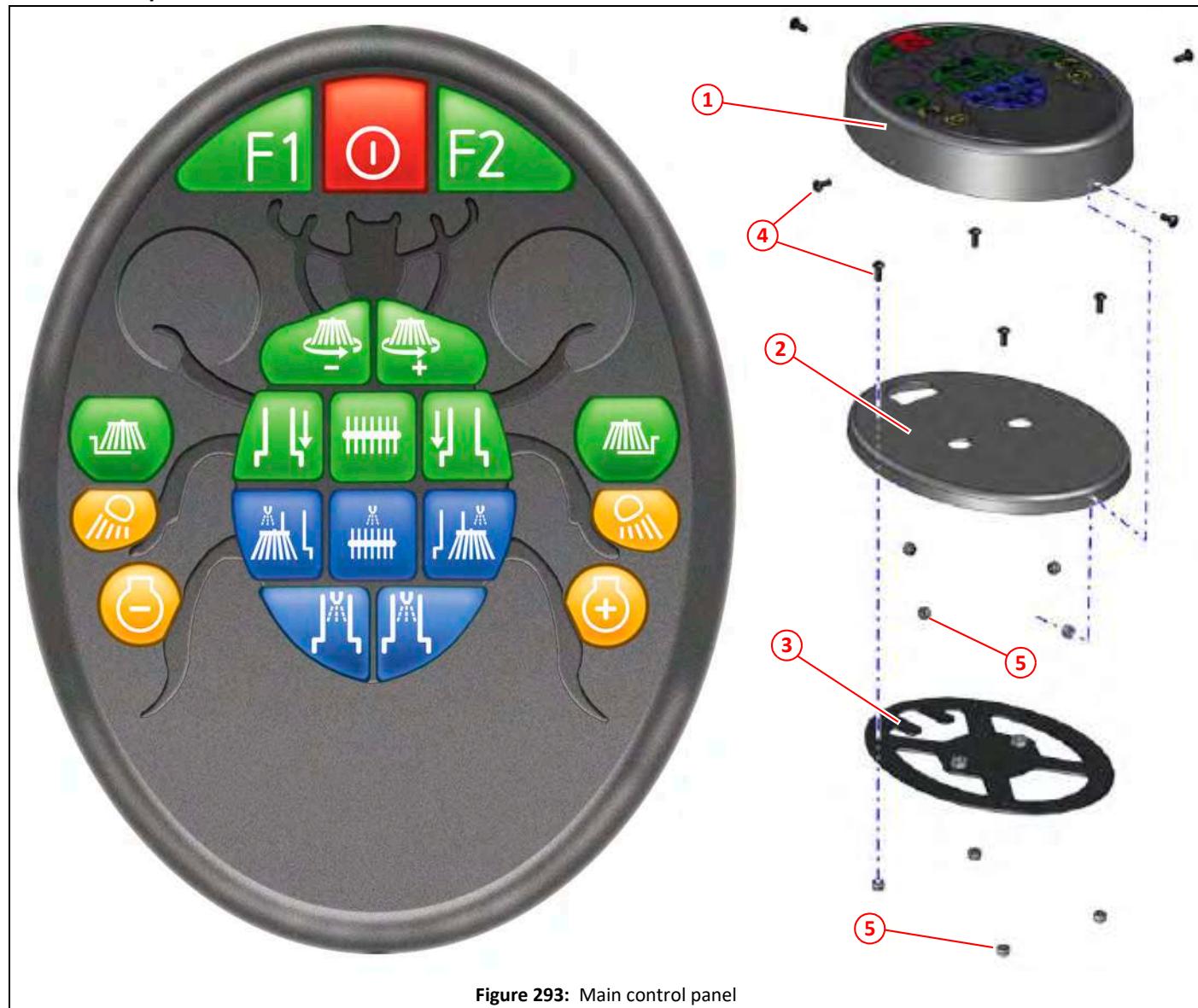
| Item | Part No | Qty | Description                                    |     |
|------|---------|-----|--|-----|
| ①    | 040456  | 1   | Pneumatic cylinder ø32 x 50, sprung return     | 380 |
| ②    | 024646  | 1   | Elbow, $\frac{1}{4}$ " BSP x ø6 push in        |     |
| ③    | 043174  | 1   | Prop kicker cylinder mount                     |     |
| ④    | 000255  | 4   | Spring washer M6, stainless steel              |     |
| ⑤    | 000252  | 4   | Setscrew M6 x 20, stainless steel              |     |
| ⑥    | 043390  | 1   | Prop kicker mount                              |     |
| ⑦    | 026163  | 2   | Clevis pin M10                                 |     |
| ⑧    | 026164  | 2   | Clip retaining M10                             |     |
| ⑨    | 011018  | 2   | Bolt HT M8 x 70                                |     |
| ⑩    | 011092  | 2   | Washer M8                                      |     |
| ⑪    | 011073  | 2   | M8 T NYLOC NUT                                 |     |
| ⑫    | 020291  | 1   | Clevis pneumatic M10 x 1.25                    |     |
| ⑬    | 047357  | 1   | Prop kicker floor mount                        |     |
| ⑭    | 011032  | 3   | Setscrew HT M10 x 30                           |     |
| ⑮    | 011094  | 3   | Washer M10                                     |     |
| ⑯    | 024650  | 2   | ø6mm green air pipe, cut to length as required |     |

# Electrical

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## Cab components

## Main control panel

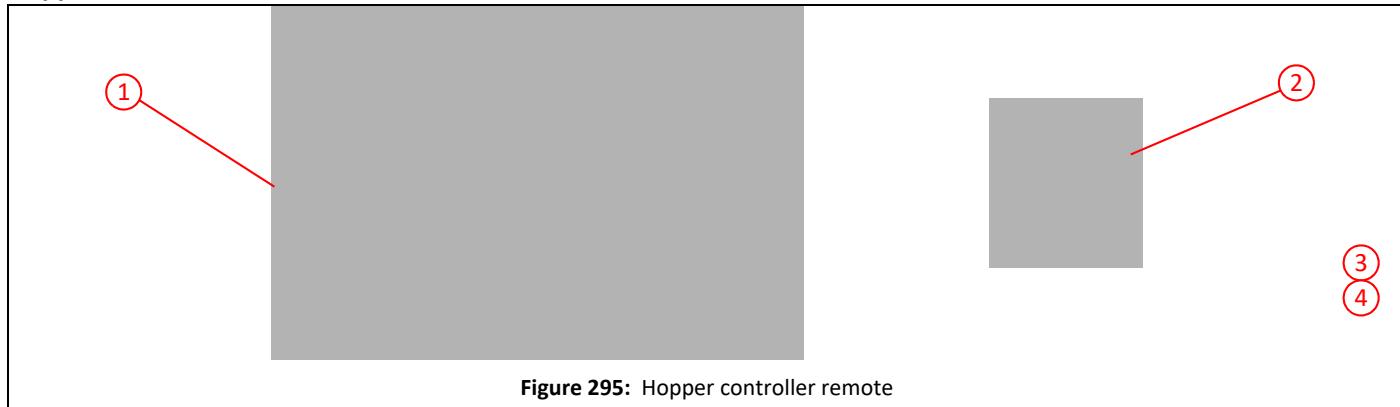


| Item | Part No | Qty | Description                           |     |
|------|---------|-----|---------------------------------------|-----|
| ①    | 037602  | 1   | Main control panel, keypad and fascia |     |
| ②    | 037053  | 1   | Backplate, main control panel         |     |
| ③    | 000304  | 8   | Socket button head M4 x 10, black     |     |
| ④    | 000134  | 8   | Nyloc nut M4                          |     |
| ⑤    | 036912  | 1   | Loom, main control panel              | 350 |
| ⑥    | 036912  | 1   | Loom, main control panel              | 350 |
| ⑦    | 036914  | 1   | Loom, power/CAN, main control panel   | 350 |

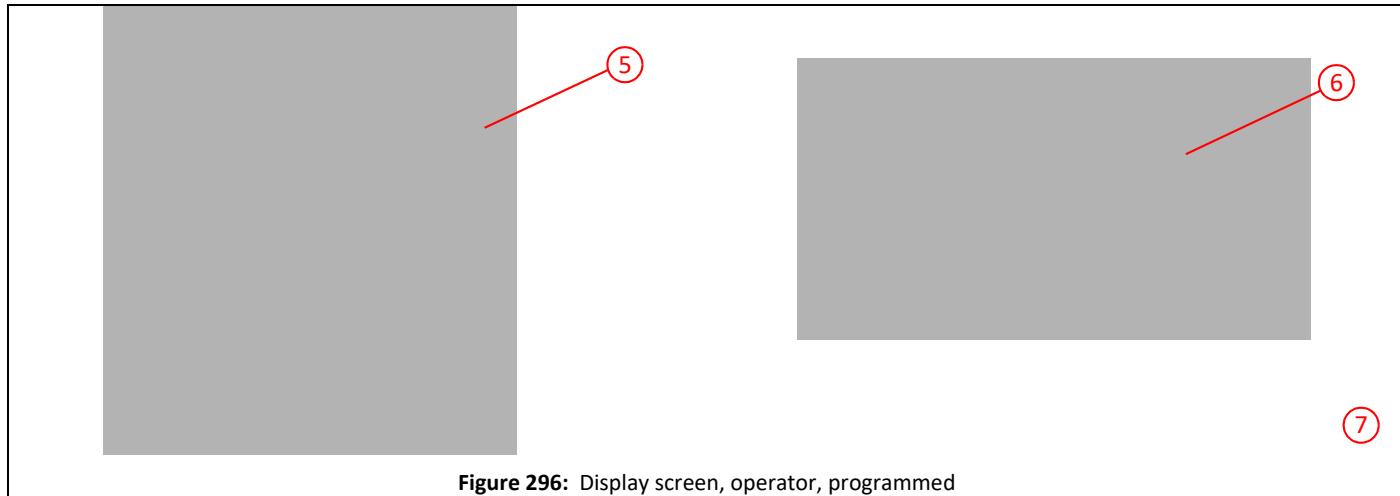
**Auxiliary controller (door pod)**

**Figure 294: Auxiliary controller (door pod)**

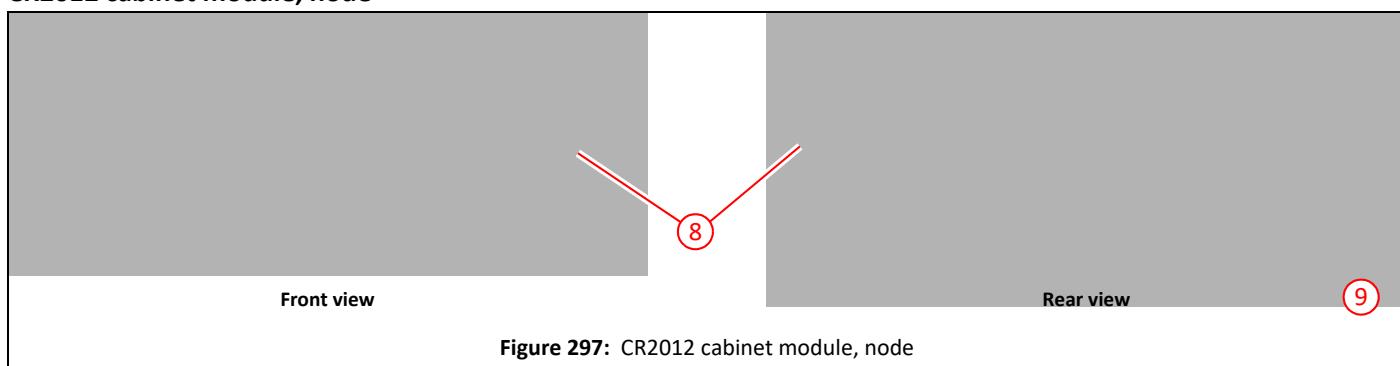
| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| ①    | 037608  | 1   | Auxiliary controller (door pod), fascia and keypad  |     |
| ②    | 037057  | 1   | Support plate, auxiliary controller (door pod)V3    |     |
| ③    | 037058  | 1   | Backplate, auxiliary controller (door pod)          |     |
| ④    | 036873  | 1   | Ergo joystick                                       |     |
| ⑤    | 046259  | 1   | Grommet, semi blind, Ø15.9                          |     |
| ⑥    | 000380  | 4   | Socket button head screw M4 x 10, black             |     |
| ⑦    | 037064  | 1   | Door pod lock washer                                |     |
| ⑧    | 011031  | 1   | Setscrew HT M10 x 25                                |     |
| ⑨    | 039545  | 1   | Label, ergo joystick                                |     |
| ⑩    | 036913  | 1   | Loom, auxiliary control panel (door pod)            | 350 |
| ⑪    | 036915  | 1   | Loom, power/CAN, auxiliary control panel (door pod) | 350 |

**Hopper controller remote**

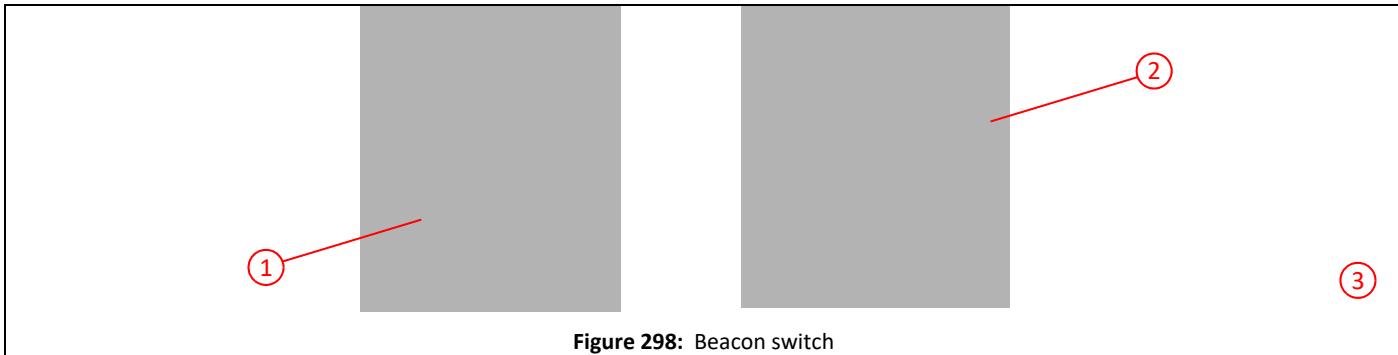
| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| ①    | 043688  | 1   | Hopper controller (PXL)   |     |
| ②    | 043691  | 1   | Holster, hopper controller (PXL)                                |     |
| ③    | 044294  | 1   | Hopper controller complete with holster, includes items ① and ② |     |
| ④    | 037047  | 1   | Loom, hopper controller   | 350 |

**Display screen, operator, programmed**

| Item | Part No | Qty | Description                                  |     |
|------|---------|-----|--|-----|
| ⑤    | 051274  | 1   | Display screen, operator, CR1084, programmed |     |
| ⑥    | 039672  | 1   | Cable, M12 to USB                            | 350 |
| ⑦    | 040349  | 1   | Loom, display screen                         | 350 |

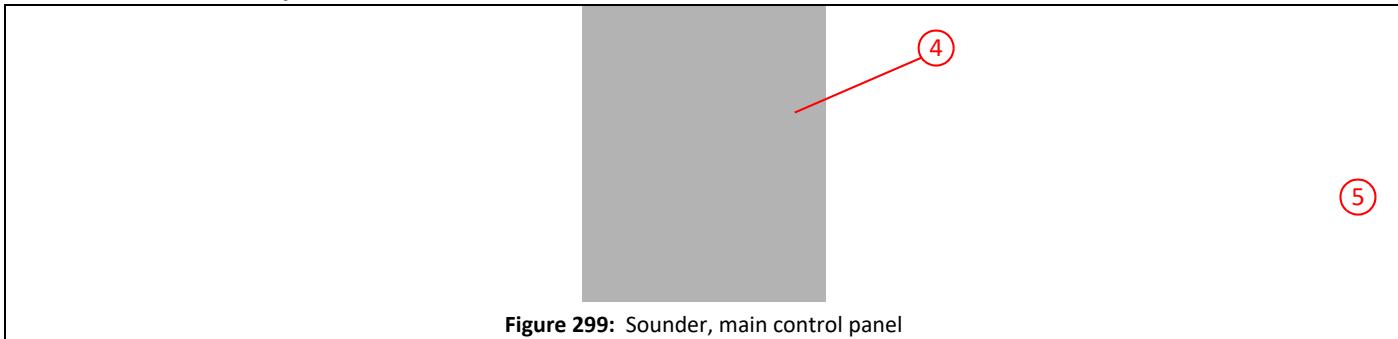
**CR2012 cabinet module, node**

| Item | Part No | Qty | Description                              |  |
|------|---------|-----|--|--|
| ⑧    | 036799  | 1   | CR2012 cabinet module, node, behind dash |  |
| ⑨    | 038013  | 1   | Loom, cab                                |  |

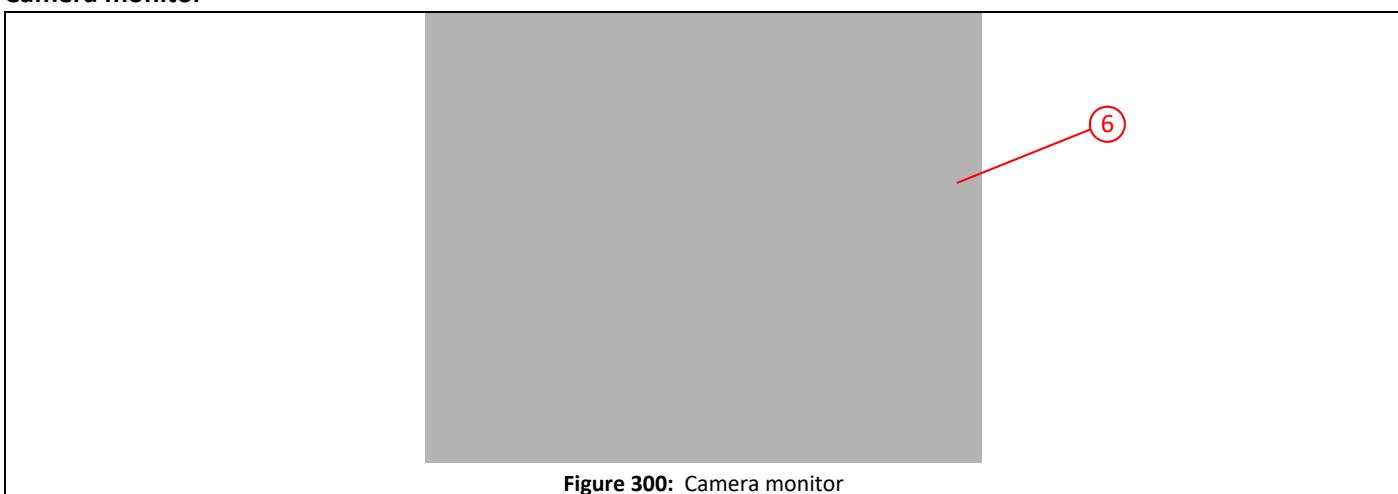
**Beacon switch**


| Item | Part No  | Qty | Description            |
|------|----------|-----|------------------------|
| ①    | 042049 * | 1   | Beacon switch, DAF     |
| ②    | 038543 * | 1   | Beacon switch, Renault |
| ③    | 038013   | 1   | Loom, cab              |

\*. Switches for other chassis manufacturers please contact Scarab Parts Department.

**Sounder, main control panel**


| Item | Part No | Qty | Description              |
|------|---------|-----|--------------------------|
| ③    | 037048  | 1   | Sounder                  |
| ⑤    | 036912  | 1   | Loom, main control panel |

**Camera monitor**


| Item | Part No  | Qty | Description    |
|------|----------|-----|----------------|
| ⑥    | 040717 * | 1   | Camera monitor |

418,423

\*. Other camera monitors can be supplied, please contact Scarab Parts Department for more information.

## Camera splitter

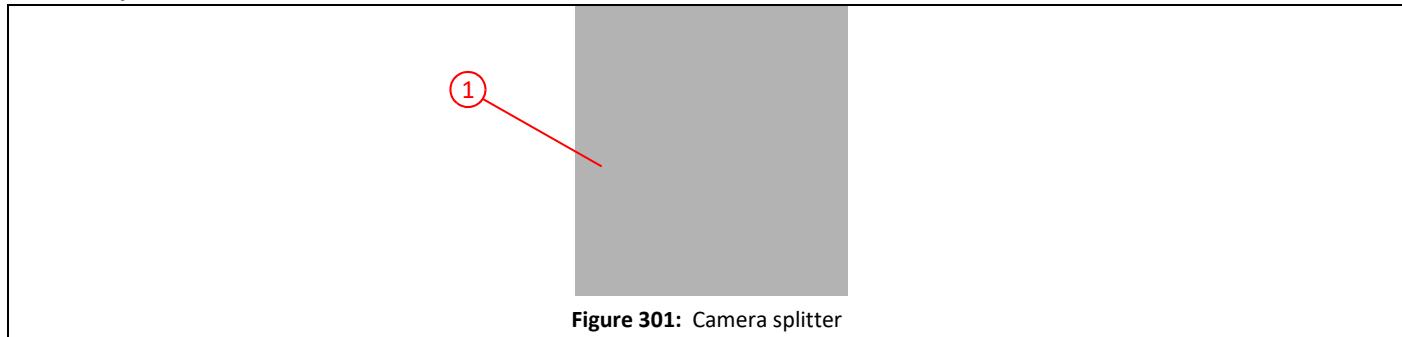


Figure 301: Camera splitter

| Item | Part No | Qty | Description     |
|------|---------|-----|-----------------|
| ①    | 041534  | 1   | Camera splitter |

## Fuses and relays, cab

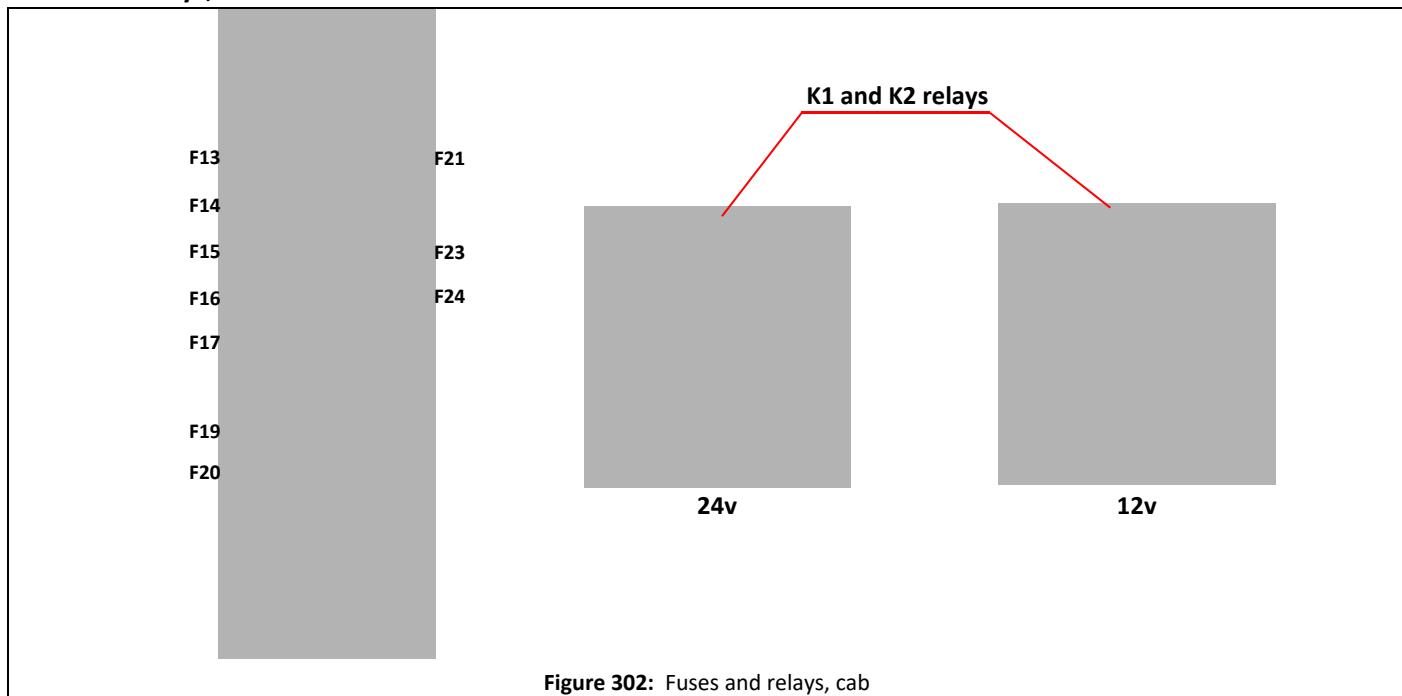


Figure 302: Fuses and relays, cab

| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| F13  | 004495  | 1   | Fuse, mini blade, 2 Amp, Vehicle ignition                           |     |
| F14  | 004393  | 1   | Fuse, mini blade, 10 Amp, Scarab, Ignition+                         |     |
| F15  | 004495  | 1   | Fuse, mini blade, 2 Amp, Node 2, LCD Monitor, Ignition+             |     |
| F16  | 004495  | 1   | Fuse, mini blade, 2 Amp, Node 0, Auxiliary Control Panel, Ignition+ |     |
| F17  | 004495  | 1   | Fuse, mini blade, 2 Amp, Node 1, Main Control Panel, Ignition+      |     |
| F19  | 004391  | 1   | Fuse, mini blade, 5 Amp, Body Builder Plug, Ignition+               |     |
| F20  | 004391  | 1   | Fuse, mini blade, 5 Amp, Hopper Remote Control Unit, Ignition+      |     |
| F21  | 004495  | 1   | Fuse, mini blade, 2 Amp, Node 2, LCD Monitor, Battery+              |     |
| F23  | 004391  | 1   | Fuse, mini blade, 5 Amp, Body Builder Plug, Battery+                |     |
| F24  | 004395  | 1   | Fuse, mini blade, 20 Amp, Beacon(s)                                 |     |
| K1   | 011768  | 1   | Relay, 10/20 Amp, Beacon(s), 12v                                    | 351 |
| K1   | 014718  | 1   | Relay, 10/20 Amp, Beacon(s), 24v                                    | 351 |
| K2   | 011768  | 1   | Relay, 10/20 Amp, Ignition, 12v                                     | 351 |
| K2   | 014718  | 1   | Relay, 10/20 Amp, Ignition, 24v                                     | 351 |

The above items are located on the cab loom and will be behind the dash on the vehicle.

## Pneumatic and Node cabinet

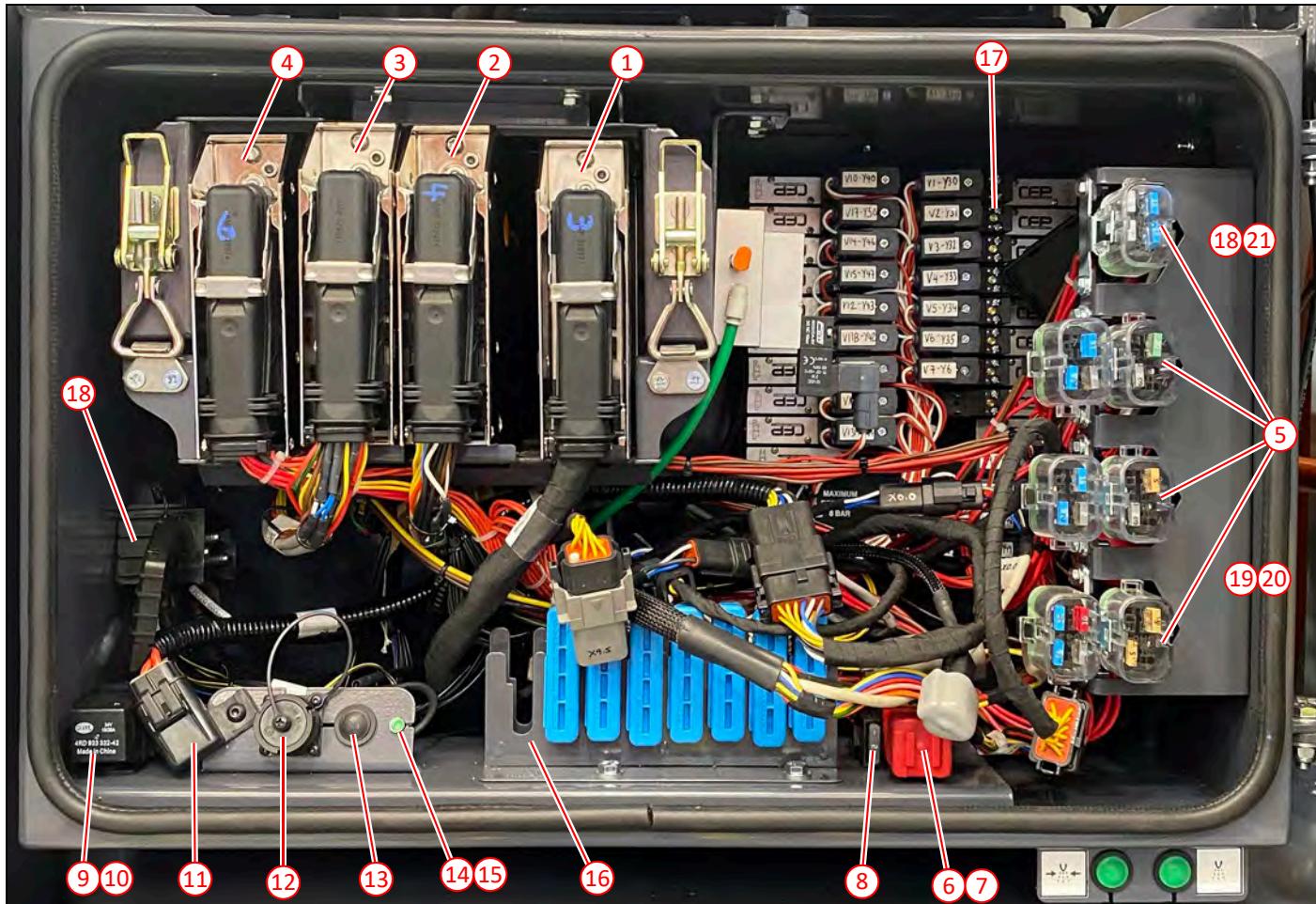


Figure 303: Pneumatic and Node cabinet

| Item | Part No | Qty | Description   |         |
|------|---------|-----|---|---------|
| ①    | 051756  | 1   | Node 3, CR0505, programmed  | 342     |
| ②    | 051758  | 1   | Node 4, CR0020, programmed  | 342     |
| ③    | 051758  | 1   | Node 5, CR0020, programmed  | 342     |
| ④    | 051758  | 1   | Node 6, CR0020, programmed  | 342     |
| ⑤    |         |     | Fuse boxes, Node 4, Node 5, Node 6, part of the node looms                        | 344,345 |
| ⑥    | 045511  | 1   | Timer relay, engine work light, K7, holder part of engine work light loom, 12V    | 342     |
| ⑦    | 014718  | 1   | Timer relay, engine work light, K7, holder part of engine work light loom, 24V    | 342     |
| ⑧    | 004485  | 1   | Fuse, blade, 2 Amp, engine work light, F33, holder part of engine work light loom |         |
| ⑨    | 011768  | 1   | Relay, fuel pump, K6, holder part of engine loom, 12v                             | 342     |
| ⑩    | 014718  | 1   | Relay, fuel pump, K6, holder part of engine loom, 24v                             | 342     |
| ⑪    | 014292  | 1   | Fuse, blade, 30 Amp, engine ECU, F29, holder part of engine loom                  |         |
| ⑫    |         |     | Engine diagnostic plug, part of Node 3 loom                                       |         |
| ⑬    |         | 1   | Engine diagnostic switch, part of Node 3 loom                                     |         |
| ⑭    | 004565  | 1   | Engine diagnostic lamp, 12V   |         |
| ⑮    | 004564  | 1   | Engine diagnostic lamp, 24V   |         |
| ⑯    | 037994  | 1   | Splice saver rack   |         |
| ⑰    |         |     | Pneumatics board  | 312,314 |
| ⑱    | 004616  | 2   | Power connection link, one either side of cabinet                                 | 342     |
| ⑲    | 036843  | 1   | Power post, M6, red, behind fuse boxes  | 343     |
| ⑳    | 004489  | 1   | Rubber boot, red, for power post  | 343     |
| ㉑    | 038223  | 1   | Switch gantry work light, green, on side of cabinet, behind fuse boxes            | 343     |

## Nodes

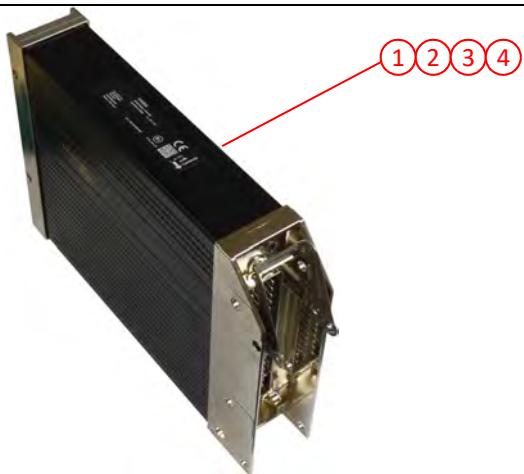


Figure 304: Nodes

| Item | Part No | Qty | Description                |
|------|---------|-----|----------------------------|
| ①    | 042342  | 1   | Node 3, CR0505, programmed |
| ②    | 042336  | 1   | Node 4, CR0020, programmed |
| ③    | 042336  | 1   | Node 5, CR0020, programmed |
| ④    | 042336  | 1   | Node 6, CR0020, programmed |

## Relays



Figure 305: Relays

| Item | Part No | Qty | Description                                    |
|------|---------|-----|--|
| ⑤    | 014718  | 1   | Relay, fuel pump, K6, <b>24v</b>               |
| ⑥    | 011768  | 1   | Relay, fuel pump, K6, <b>12v</b>               |
| ⑦    | 043720  | 1   | Timer relay, gantry work light, K7, <b>24v</b> |
| ⑧    | 044511  | 1   | Timer relay, gantry work light, K7, <b>12v</b> |

## Power connection link

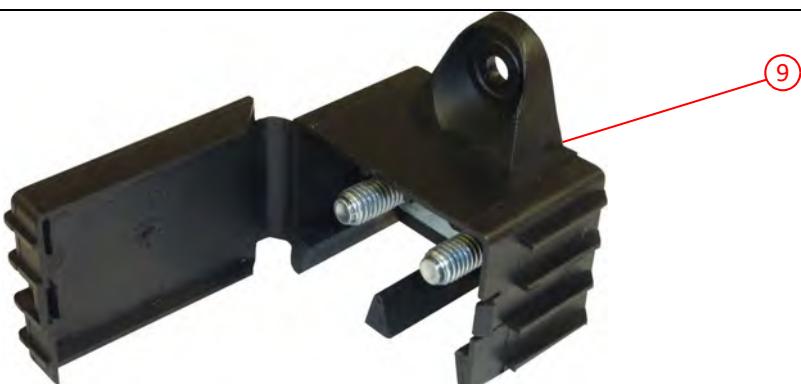
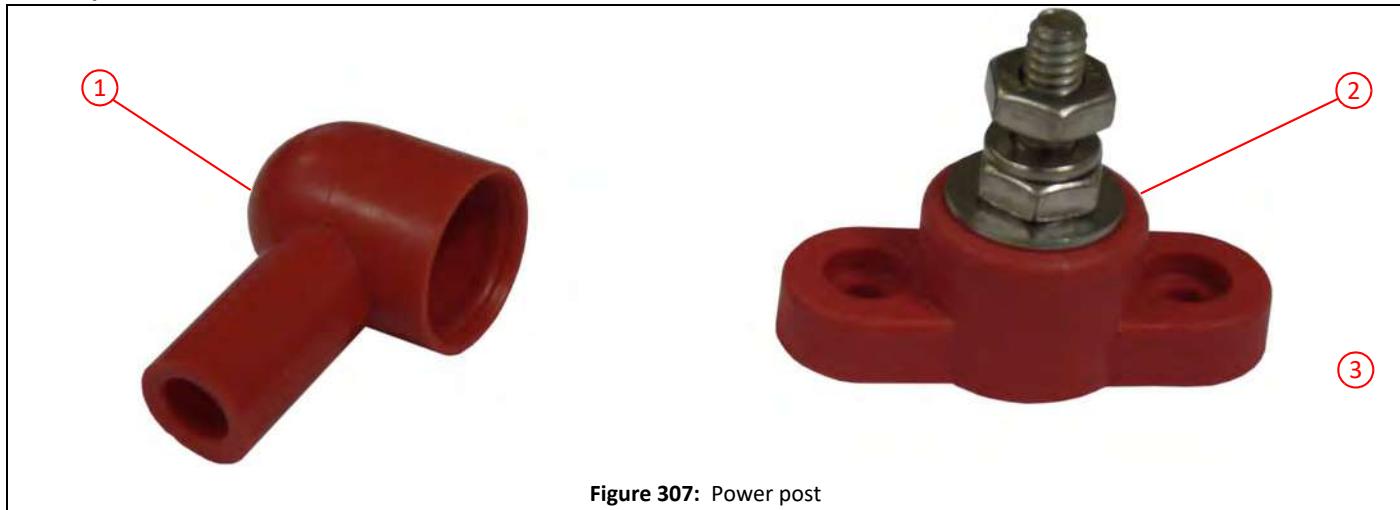


Figure 306: Power connection link

| Item | Part No | Qty | Description                                     |
|------|---------|-----|---|
| ⑨    | 036844  | 1   | Power connection link, supplied with Nyloc nuts |

**Power post**


| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 004489  | 1   | Rubber boot, power post, red   |
| ②    | 036843  | 1   | Power post, red  |
| ③    | 000429  | 1   | Nyloc nut, $\frac{1}{4}$ " UNC, plated, to be used on power post instead of top half nut |

**Switch, gantry work light**


| Item | Part No | Qty | Description                      |
|------|---------|-----|----------------------------------|
| ④    | 038223  | 1   | Switch, gantry work light, green |
| ⑤    | 043719  | 1   | Loom, gantry work light          |

## Cabinet fuse holder arrangement

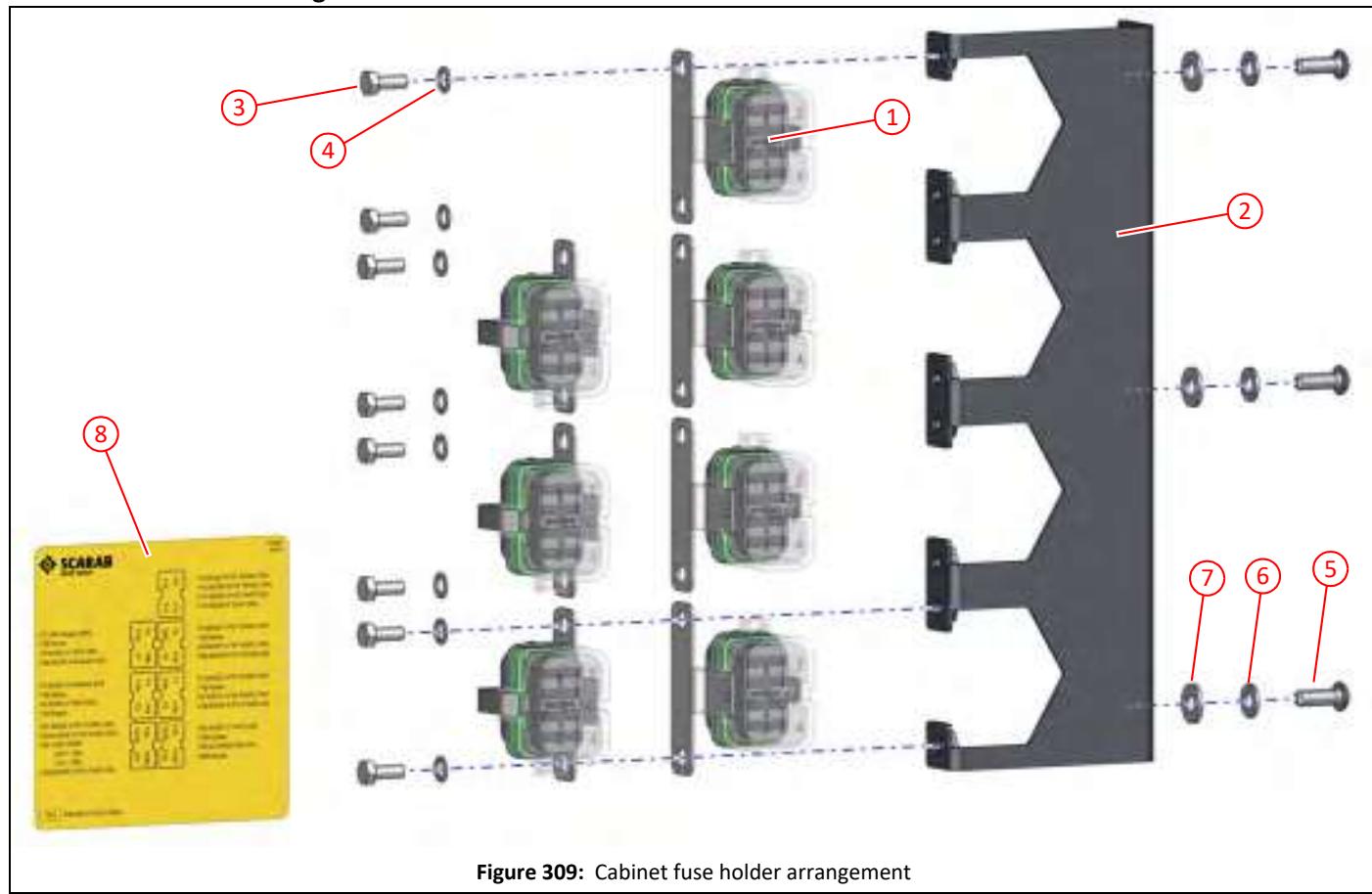


Figure 309: Cabinet fuse holder arrangement

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 004626  | 7   | Fuse holder assembly, 4 way                                     |
| ②    | 047829  | 1   | Cabinet fuse mount  |
| ③    | 000097  | 8   | Bolt M5 x 12  |
| ④    | 000411  | 8   | Spring washer M5  |
| ⑤    | 000373  | 3   | Socket dome head screw M6 x 16, stainless steel                 |
| ⑥    | 000255  | 3   | Spring washer M6, stainless steel                               |
| ⑦    | 000254  | 3   | Washer M6, stainless steel                                      |
| ⑧    | 047686  | 1   | Label - V3.2 cabinet fuses, Maven 65, on inside of cabinet door |

## Cabinet fuses

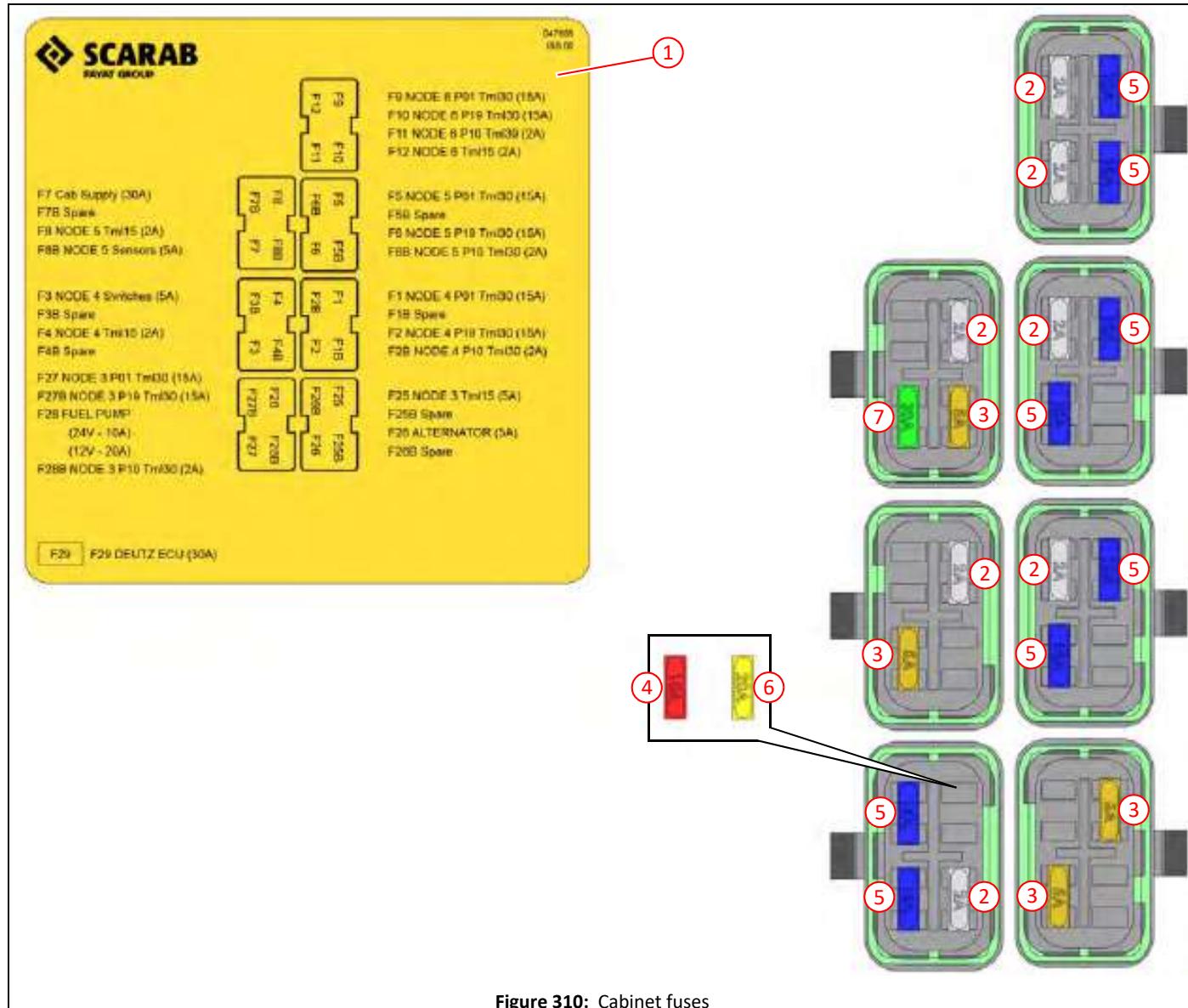
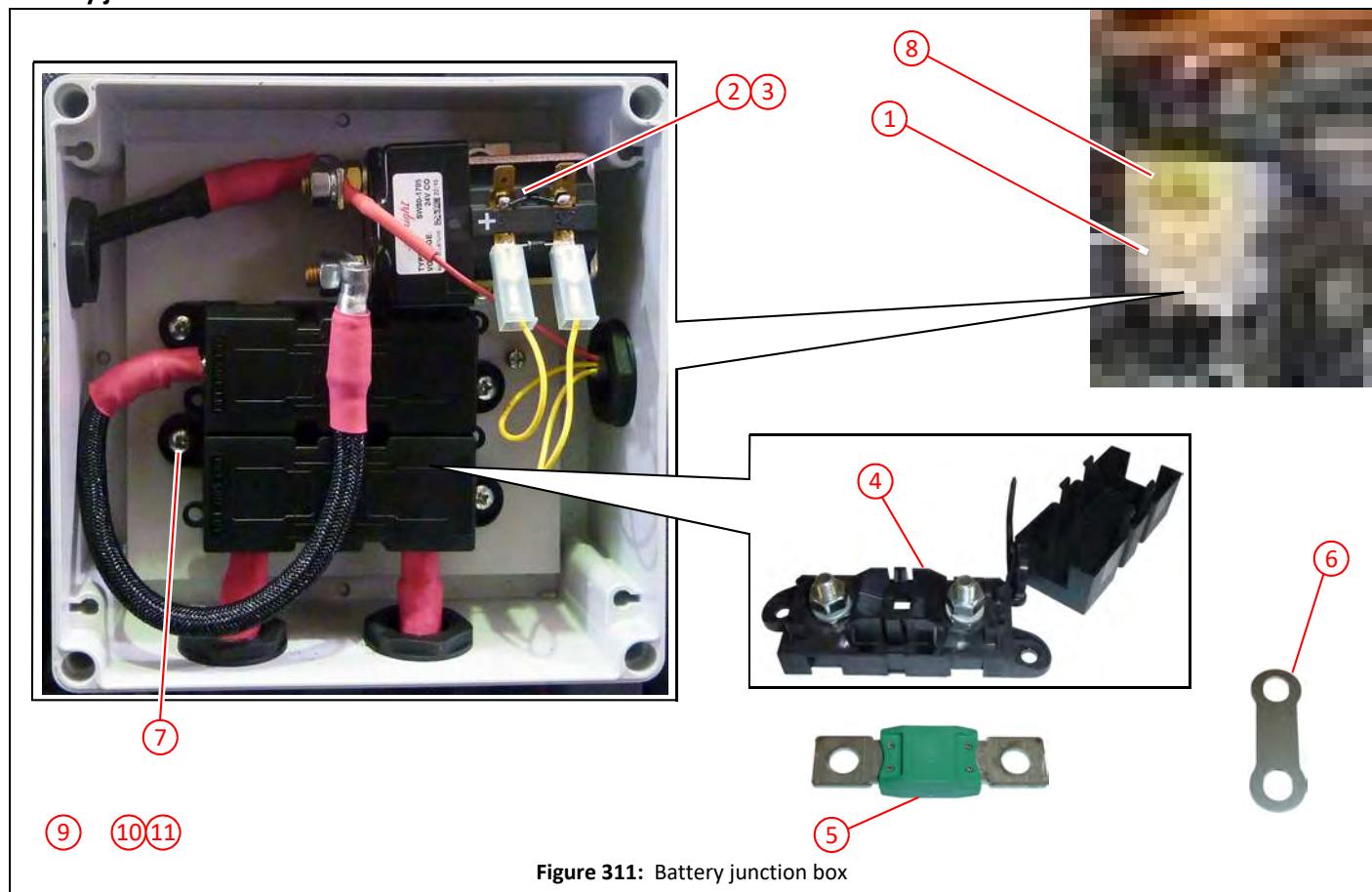


Figure 310: Cabinet fuses

| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 047686  | 1   | Label - V3.2 cabinet fuses, Maven 65, on inside of cabinet door |
| ②    | 004495  | 7   | Fuse, mini blade, 2 Amp   |
| ③    | 004391  | 4   | Fuse, mini blade, 5 Amp   |
| ④    | 004393  | 1   | Fuse, mini blade, 10 Amp  |
| ⑤    | 004394  | 8   | Fuse, mini blade, 15 Amp  |
| ⑥    | 004395  | 1   | Fuse, mini blade, 20 Amp  |
| ⑦    | 004397  | 1   | Fuse, mini blade, 30 Amp  |

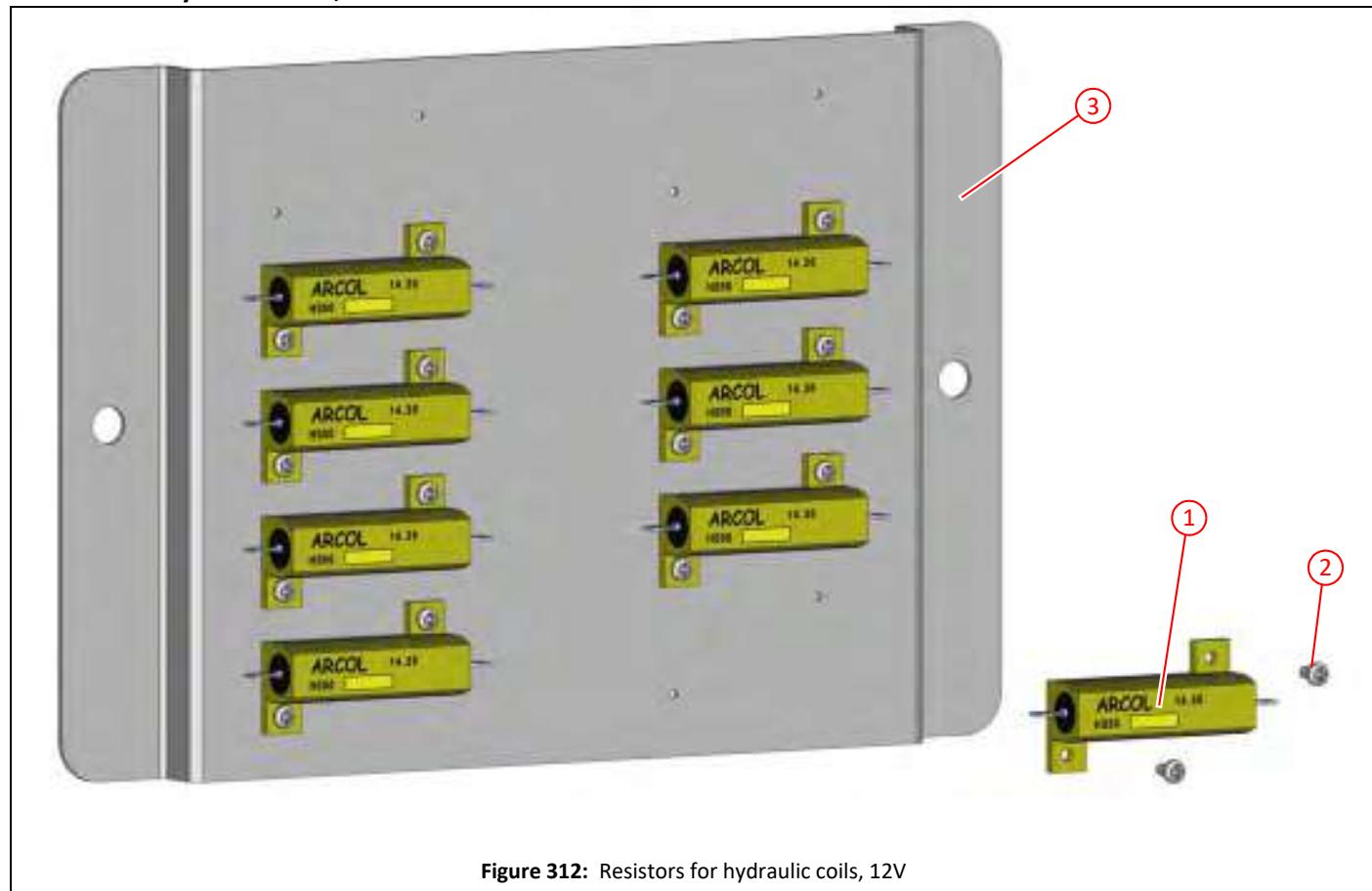
Please note the correct fuse to use for 12V and 24V systems in F28 FUEL PUMP.

## Battery junction box



| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    | 043350  | 1   | Battery junction box, includes the lid, lid fixings and the 4 battery cables                 |     |
| ②    | 038571  | 1   | Relay, glow plug heat, K5, 12v   | 351 |
| ③    | 034207  | 1   | Relay, glow plug heat, K5, 24v   | 351 |
| ④    | 004506  | 2   | Mega fuse holder   |     |
| ⑤    | 004422  | 2   | Mega fuse 125 Amp, F30 and F31   | 351 |
| ⑥    | 043381  | 1   | BUS bar, mega fuse, connects the two mega fuses on the right hand side                       |     |
| ⑦    | 011115  | 6   | Self tapping screw, No.10 x $\frac{1}{2}$ " POZIDRIV, for fitting mega fuse holder and relay |     |
| ⑧    | 043268  | 1   | Label - Warning electrical   |     |
| ⑨    | 046885  | 1   | Loom, DEUTZ STG V engine   |     |
| ⑩    | 044537  | 1   | Junction box assembly, includes items ①-⑧, 12v (not item ③)                                  |     |
| ⑪    | 043380  | 1   | Junction box assembly, includes items ①-⑧, 24v (not item ②)                                  |     |

## Resistors for hydraulic coils, 12V



| Item | Part No | Qty | Description   |
|------|---------|-----|---|
| ①    | 048491  | 8   | 1 OHM resistor loom                                     |
| ②    | 000548  | 16  | Pan head, POZIDRIV, self tapping screw No.4 x 6mm, zinc |
| ③    | 048490  | 1   | Plate, 1 OHM resistors                                  |

*Only used on 12V systems. This is located inside the hydraulic cabinet, behind the main valve block.*

## Light, lamps and cameras

## LED work light



Figure 313: LED work light

| Item | Part No | Qty | Description             |     |
|------|---------|-----|-------------------------|-----|
| ①    | 047757  | 1   | LED work light, 12/24v  |     |
| ②    | 047385  | 1   | Loom, Node 5            | 350 |
| ③    | 043719  | 1   | Loom, gantry work light | 350 |

## LED marker rear light



Figure 314: LED rear marker light

| Item | Part No | Qty | Description           |     |
|------|---------|-----|-----------------------|-----|
| ④    | 030773  | 1   | LED rear marker light |     |
| ⑤    | 036911  | 1   | Loom, hopper          | 350 |

## Beacon



Figure 315: Beacon

| Item | Part No | Qty | Description                            |     |
|------|---------|-----|--|-----|
| ⑥    | 046659  | 1   | LED beacon, single bolt fixing, 10-30V |     |
| ⑦    | 036911  | 1   | Loom, hopper                           | 350 |
| ⑧    | 040727  | 1   | Loom, twin beacons                     | 350 |

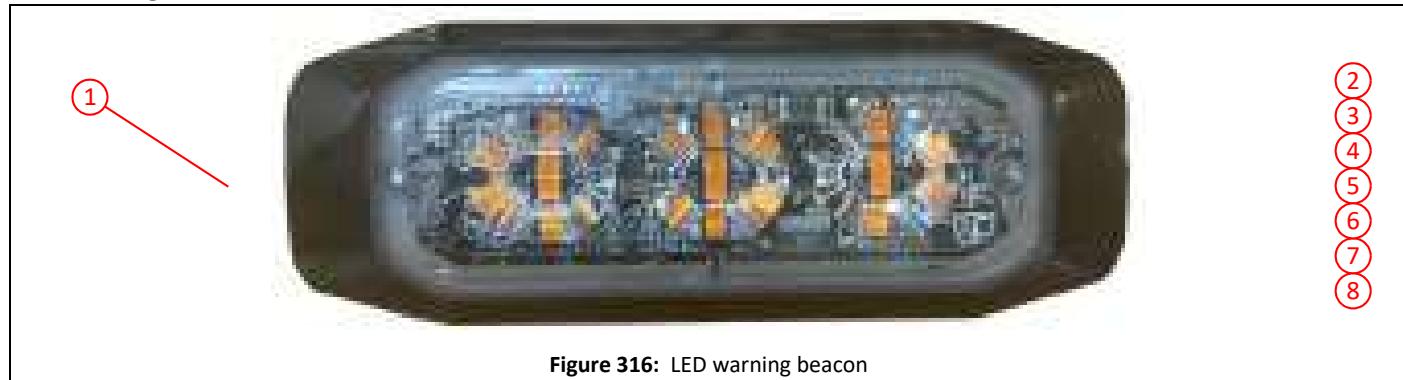
**LED warning beacon**


Figure 316: LED warning beacon

| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    | 047979  | 1   | BST LED warning light assembly                           |     |
| ②    | 047782  | 1   | Loom, Main, LED BST warning light                        | 350 |
| ③    | 047783  | 1   | Loom, 1750mm, LED BST warning light                      | 350 |
| ④    | 047784  | 1   | Loom, 2750mm, LED BST warning light                      | 350 |
| ⑤    | 047785  | 1   | Loom, 4750mm, LED BST warning light                      | 350 |
| ⑥    | 047786  | 1   | Loom, Y cable, LED BST warning light                     | 350 |
| ⑦    | 004049  | 1   | Cable, 9/0.30 twin core round, cut to length required    | 350 |
| ⑧    | 004161  | 1   | Conduit (split), flexible, Ø15.7, cut to length required |     |

**Cameras**


Figure 317: Cameras

| Item | Part No | Qty | Description                    |  |
|------|---------|-----|--------------------------------|--|
| ⑨    | 040354  | 1   | Camera                         |  |
| ⑩    | 043897  | 1   | Camera, eyeball                |  |
| ⑪    | 040353  | 1   | Power supply and cable, camera |  |
| ⑫    | 000484  | 2   | UM & L socket terminal caps    |  |
| ⑬    | 040355  | 1   | Cable, camera, 15m             |  |
| ⑭    | 040719  | 1   | Cable, camera, 5m              |  |
| ⑮    | 040718  | 1   | Cable, camera, 2,5m            |  |

**Wiring looms and cables**

| Part No | Description  |     |
|---------|--|-----|
| 036842  | M12 plug/cable and valve plug type B   |     |
| 036911  | Loom, hopper   |     |
| 036912  | Loom, main controller keypad   |     |
| 036913  | Loom, auxiliary controller (door pod) keypad   |     |
| 036914  | Loom, main controller keypad, power/CAN  |     |
| 036915  | Loom auxiliary controller (door pod), power/CAN  |     |
| 037047  | Loom, hopper controller, cab   |     |
| 037331  | Loom, brush up/down pressure   |     |
| 038013  | Loom, cab  |     |
| 039672  | Cable, M12 to USB  |     |
| 040349  | Loom, display screen   |     |
| 040727  | Loom, twin beacon  |     |
| 046885  | Loom, DEUTZ STG V engine   |     |
| 047383  | Loom, Node 3 - <b>Note:</b> Supplied with 10 Amp fuse in F28 for <b>24v</b> . 20 Amp fuse required if <b>12v</b> . | 341 |
| 047384  | Loom, Node 4   | 341 |
| 043347  | Loom, hydraulic block  |     |
| 047385  | Loom, Node 5   | 341 |
| 047386  | Loom, Node 6   | 341 |
| 043435  | Cable, battery-starter, positive   |     |
| 043719  | Loom, gantry work light  | 341 |
| 047782  | Loom, Main, LED BST warning light  | 349 |
| 047783  | Loom, 1750mm, LED BST warning light  | 349 |
| 047784  | Loom, 2750mm, LED BST warning light  | 349 |
| 047785  | Loom, 4750mm, LED BST warning light  | 349 |
| 047786  | Loom, Y cable, LED BST warning light   | 349 |
| 004049  | Cable, 9/0.30 twin core round  | 349 |
| 038536  | Cable, battery, positive, red, <b>24v</b>  |     |
| 043436  | Cable, engine/CANbus earth, <b>24v</b>   |     |
| 044530  | Cable, engine/CANbus earth, <b>12v</b>   |     |
| 044531  | Cable, battery, positive, red, <b>12v</b>  |     |
| 046708  | Loom, DEUTZ power supply, <b>12v</b> only  |     |

**Switches**

| Part No  | Description                      |     |
|----------|----------------------------------|-----|
| 038223   | Switch, gantry work light, green | 341 |
| 038543 * | Beacon switch, Renault           |     |
| 042049 * | Beacon switch, DAF               |     |

\*. Switches for other chassis manufacturers please contact Scarab Parts Department.

**Sensors**

| Part No | Description  |     |
|---------|--|-----|
| 032627  | Proximity sensor, hopper raise                         |     |
| 041698  | Low level sensor, engine coolant expansion tank        |     |
| 036871  | Float switch, with amp plug, water tank                | 215 |
| 035466  | Fuel sender unit 450mm                                 |     |
| 045113  | Water in fuel (WIF) sensor, fuel filter, with cable    |     |
| 043797  | Lubrication oil pressure sensor                        |     |
| 043814  | Coolant temperature sender                             |     |
| 047885  | Pressure sensor, 0 - 250mBar, $\frac{1}{4}$ " BSP male |     |

For location of the engine sensors see the Engine section.

**Fuses**

| Part No | Description          |     |
|---------|----------------------|-----|
| 004495  | Fuse, mini, 2 Amp    |     |
| 004569  | Fuse, mini, 3 Amp    |     |
| 004391  | Fuse, mini, 5 Amp    |     |
| 004392  | Fuse, mini, 7.5 Amp  |     |
| 004393  | Fuse, mini, 10 Amp   |     |
| 004394  | Fuse, mini, 15 Amp   |     |
| 004395  | Fuse, mini, 20 Amp   |     |
| 004396  | Fuse, mini, 25 Amp   |     |
| 004397  | Fuse, mini, 30 Amp   |     |
| 004485  | Fuse, blade, 2 Amp   |     |
| 014284  | Fuse, blade, 3 Amp   |     |
| 014285  | Fuse, blade, 4 Amp   |     |
| 014286  | Fuse, blade, 5 Amp   |     |
| 014287  | Fuse, blade, 7.5 Amp |     |
| 014288  | Fuse, blade, 10 Amp  |     |
| 014289  | Fuse, blade, 15 Amp  |     |
| 014290  | Fuse, blade, 20 Amp  |     |
| 014291  | Fuse, blade, 25 Amp  |     |
| 014292  | Fuse, blade, 30 Amp  |     |
| 004422  | Mega fuse 125 Amp    | 346 |

**Relays**

| Part No | Description                                    |  |
|---------|--|--|
| 011768  | Relay, K1, K2, K6, <b>12v</b>                  |  |
| 014718  | Relay, K1, K2, K6, <b>24v</b>                  |  |
| 038571  | Relay, glow plug heat, F30, <b>12v</b>         |  |
| 034207  | Relay, glow plug heat, F30, <b>24v</b>         |  |
| 044511  | Timer relay, gantry work light, K7, <b>12v</b> |  |
| 043720  | Timer relay, gantry work light, K7, <b>24v</b> |  |

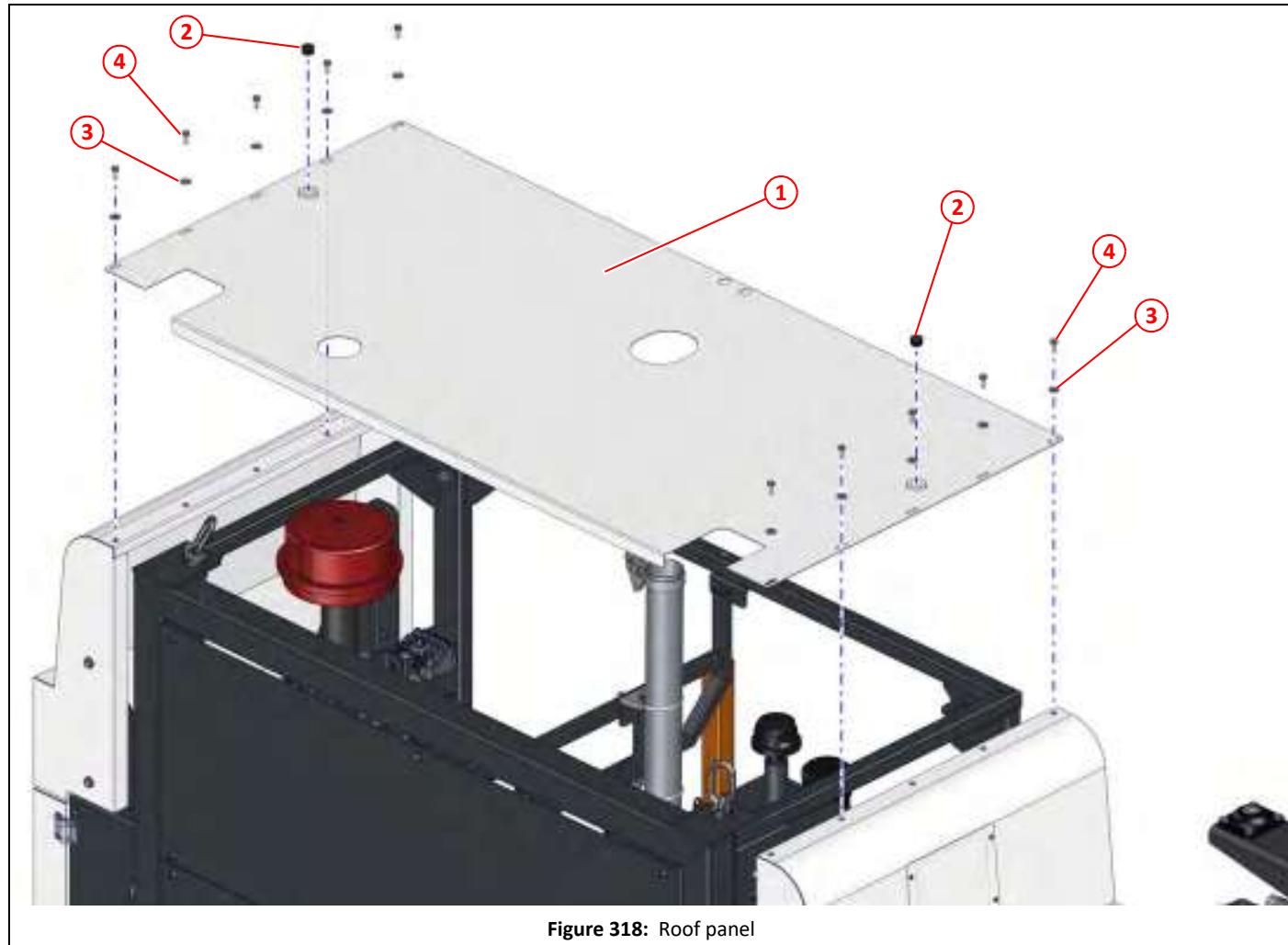


# Engine frame and subframe

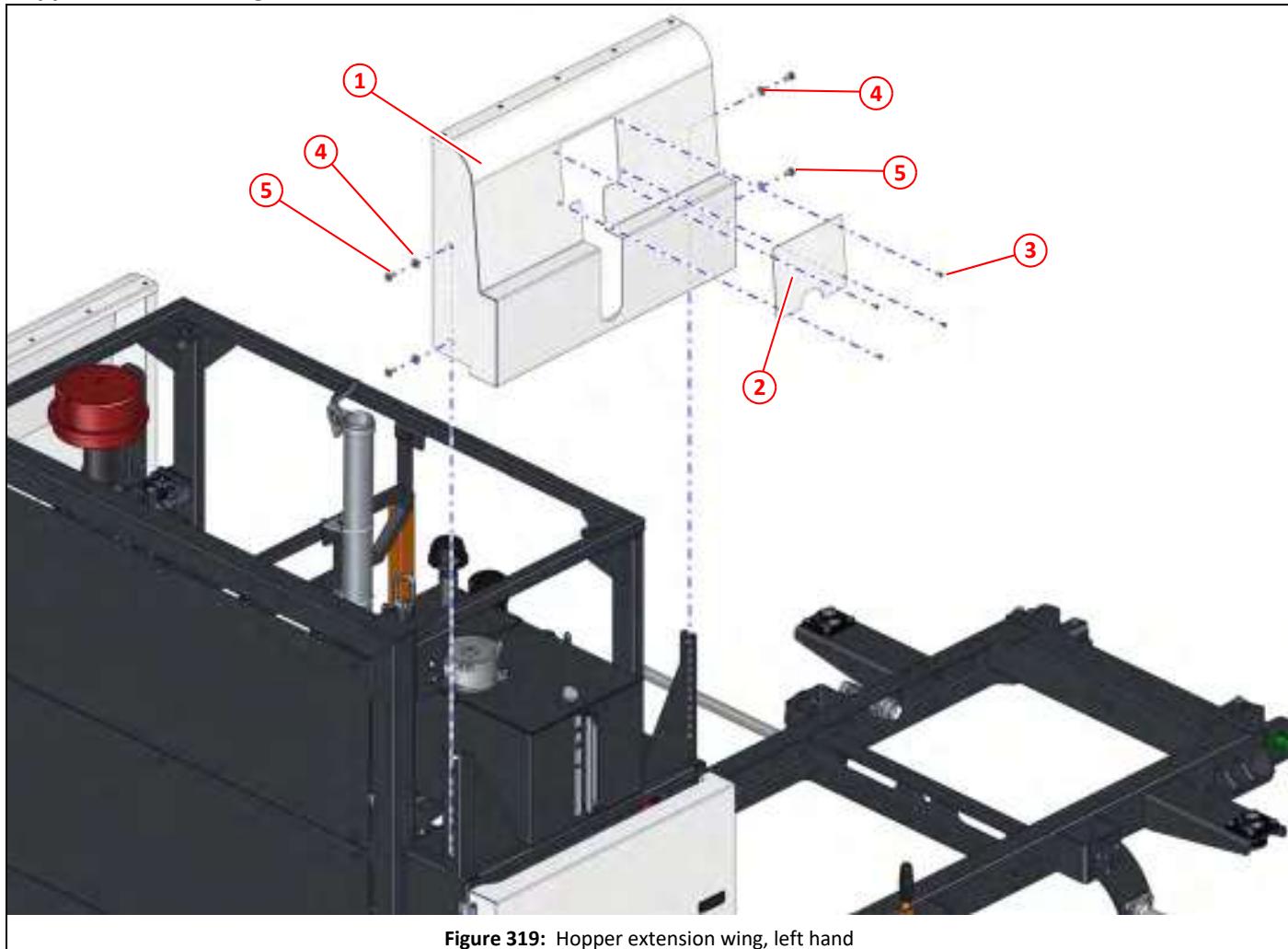
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## Engine Frame

## Roof panel



| Item | Part No | Qty | Description                |
|------|---------|-----|----------------------------|
| ①    | 048689  | 1   | Roof panel                 |
| ②    | 026173  | 2   | Plastic plug ø25.4 (black) |
| ③    | 011092  | 10  | Washer M8                  |
| ④    | 011010  | 10  | Setscrew HT M8 x 20        |

**Hopper extension wing, left hand**


| Item | Part No | Qty | Description                                     |  |
|------|---------|-----|---|--|
| ①    | 046910  | 1   | Hopper extension wing, left hand, engine frame  |  |
| ②    | 047911  | 1   | Oil fill cover                                  |  |
| ③    | 000373  | 4   | Socket dome head screw M6 x 16, stainless steel |  |
| ④    | 011094  | 4   | Washer M10                                      |  |
| ⑤    | 011030  | 4   | Setscrew HT M10 x 20                            |  |

## Hopper extension wing, right hand

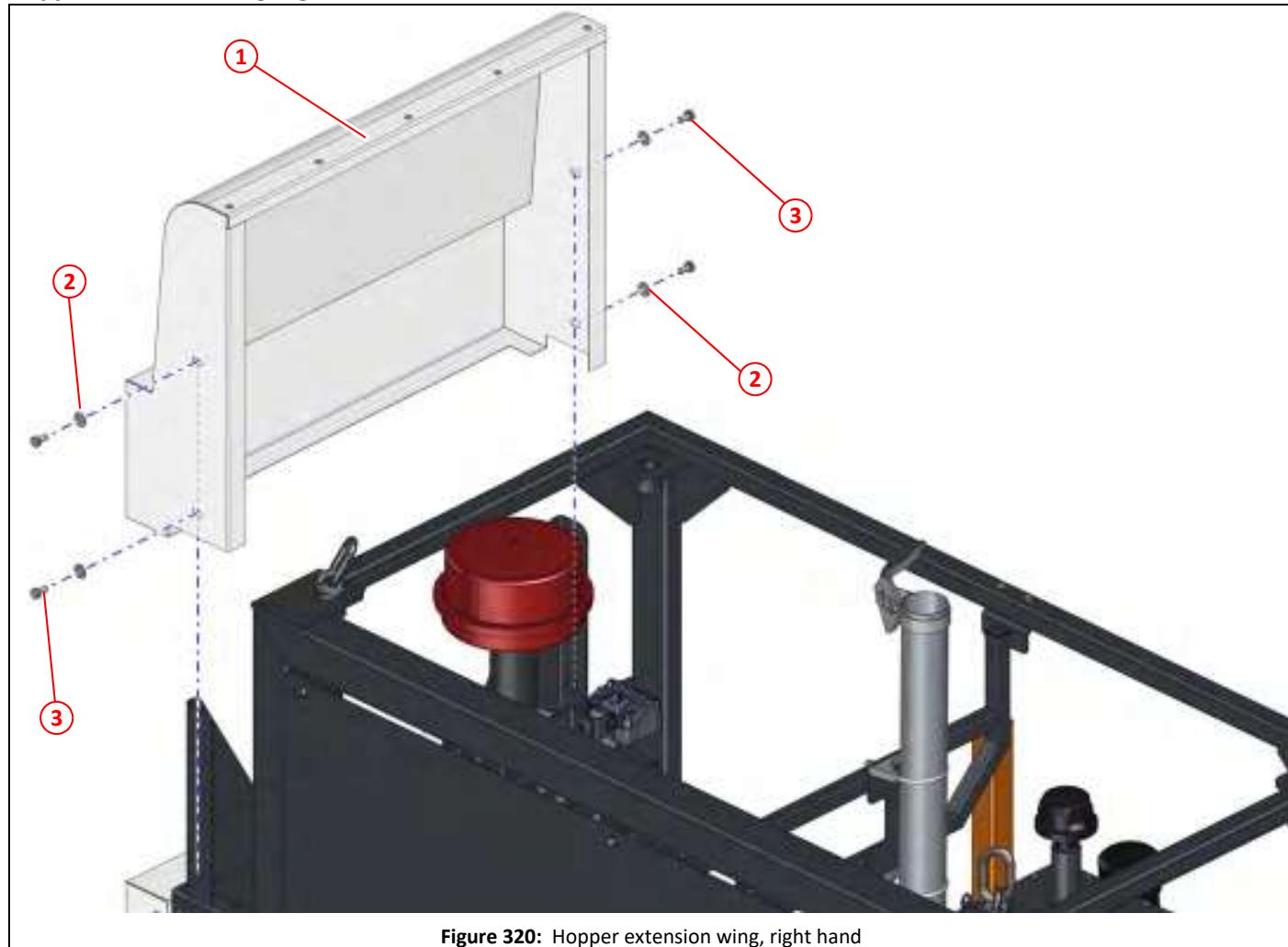
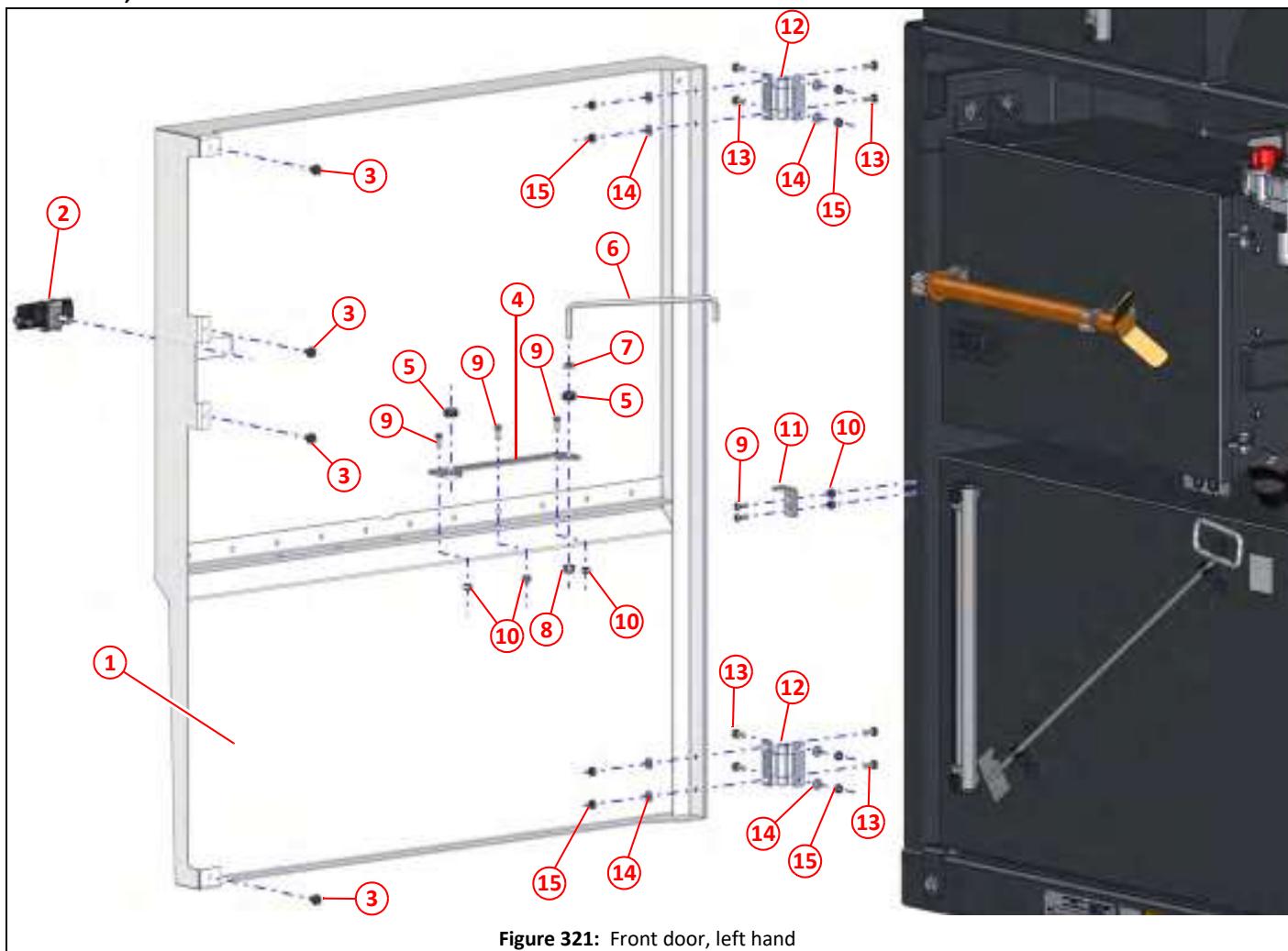


Figure 320: Hopper extension wing, right hand

| Item | Part No | Qty | Description                                     |
|------|---------|-----|---|
| ①    | 047367  | 1   | Hopper extension wing, right hand, engine cover |
| ②    | 011094  | 4   | Washer M10                                      |
| ③    | 011030  | 4   | Setscrew HT M10 x 20                            |

**Front door, left hand**

**Figure 321: Front door, left hand**

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 046907  | 1   | Front door, left hand, engine frame  |
| ②    | 035662  | 1   | Panel latch, locking   |
| ③    | 042506  | 4   | Rubber foot, push on   |
| ④    | 046719  | 1   | Door stay mount  |
| ⑤    | 011756  | 2   | Grommet $\varnothing 19.1 \times \varnothing 12.7 \times 3.2 \times \varnothing 7.9$ |
| ⑥    | 044407  | 1   | Door stay  |
| ⑦    | 000516  | 1   | Half nut M8, stainless steel   |
| ⑧    | 000263  | 1   | Nyloc nut M8, stainless steel  |
| ⑨    | 000373  | 5   | Socket dome head screw M6 x 16, stainless steel                                      |
| ⑩    | 000253  | 5   | Nyloc nut T M6, stainless steel  |
| ⑪    | 046720  | 1   | Bracket, door stay   |
| ⑫    | 028583  | 2   | Hinge  |
| ⑬    | 011001  | 8   | Setscrew HT M6 x 16  |
| ⑭    | 011090  | 8   | Washer M6  |
| ⑮    | 011071  | 8   | Nyloc nut T M6   |

# Engine frame and subframe

## Front door, right hand

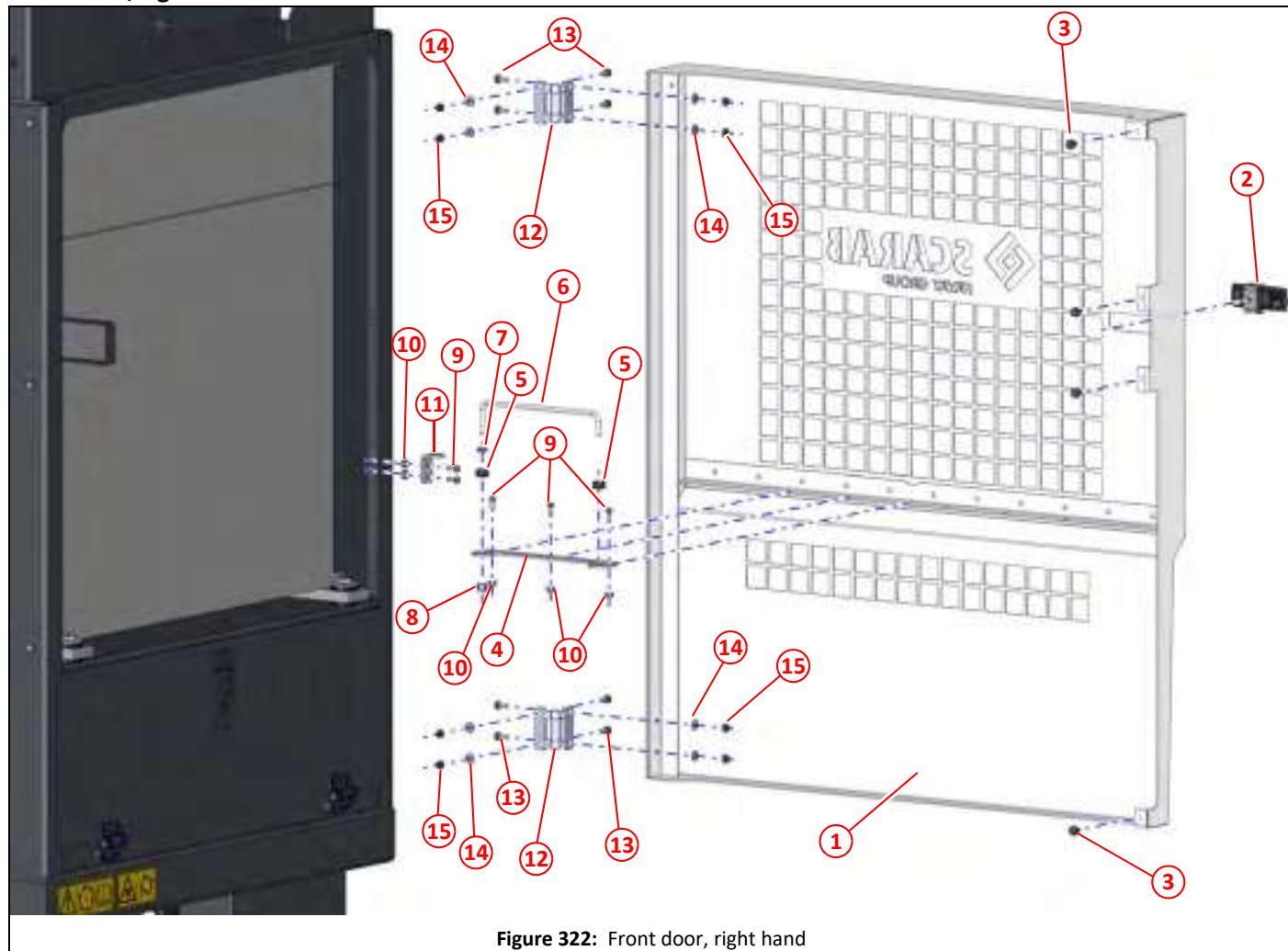
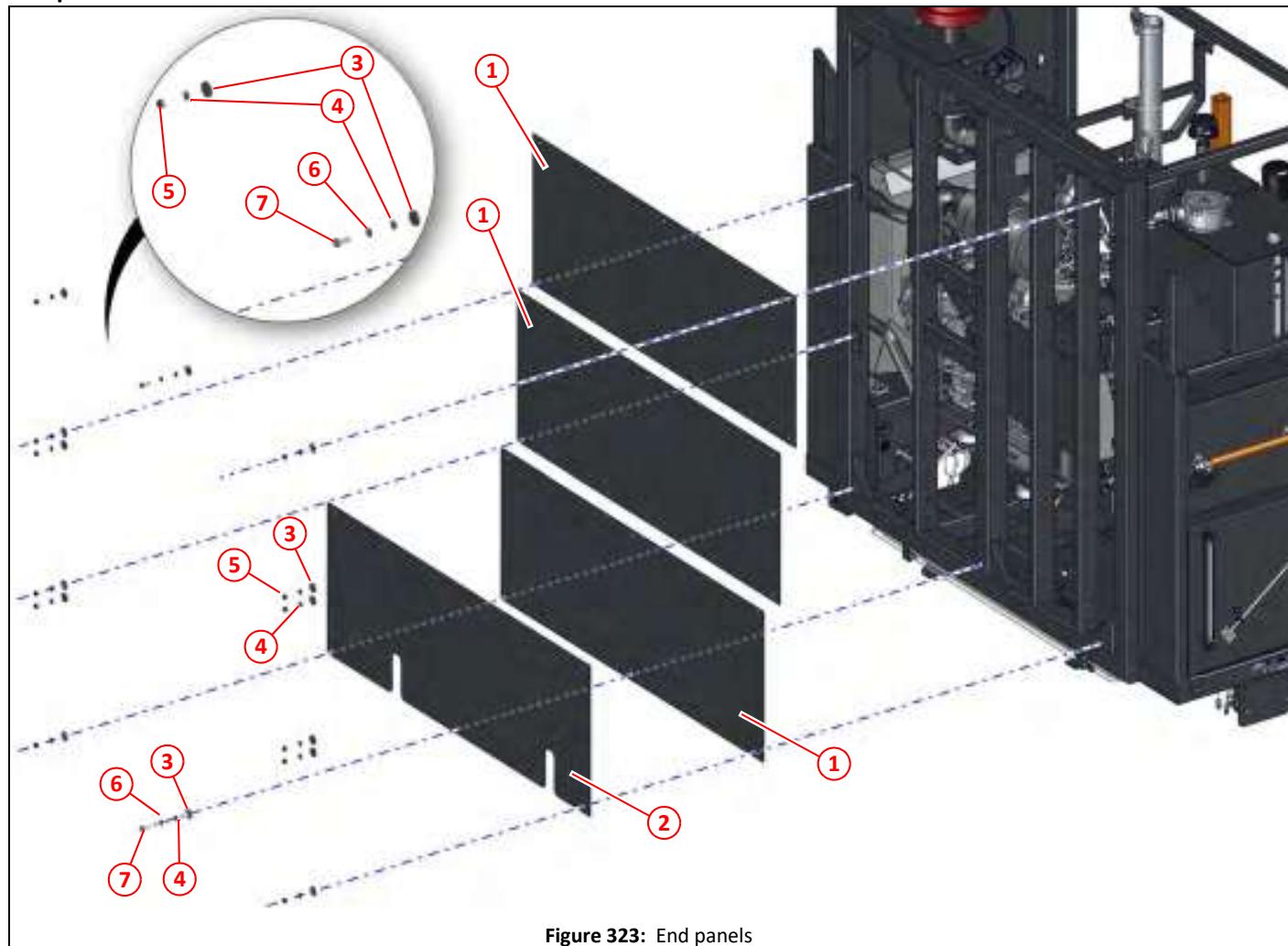


Figure 322: Front door, right hand

| Item | Part No | Qty | Description                                     |
|------|---------|-----|---|
| ①    | 048694  | 1   | Front door, right hand, engine frame            |
| ②    | 035662  | 1   | Panel latch, locking                            |
| ③    | 042506  | 4   | Rubber foot, push on                            |
| ④    | 046719  | 1   | Door stay mount                                 |
| ⑤    | 011756  | 2   | Grommet ø19.1 x ø12.7 x 3.2 x ø7.9              |
| ⑥    | 044407  | 1   | Door stay                                       |
| ⑦    | 000516  | 1   | Half nut M8, stainless steel                    |
| ⑧    | 000263  | 1   | Nyloc nut M8, stainless steel                   |
| ⑨    | 000373  | 5   | Socket dome head screw M6 x 16, stainless steel |
| ⑩    | 000253  | 5   | Nyloc nut T M6, stainless steel                 |
| ⑪    | 046720  | 1   | Bracket, door stay                              |
| ⑫    | 028583  | 2   | Hinge   |
| ⑬    | 011001  | 8   | Setscrew HT M6 x 16                             |
| ⑭    | 011090  | 8   | Washer M6                                       |
| ⑮    | 011071  | 8   | Nyloc nut T M6                                  |

**End panels**

**Figure 323: End panels**

| Item | Part No  | Qty | Description                                      |  |
|------|----------|-----|--|--|
| ①    | 044867   | 3   | End panel, standard, engine frame                |  |
| ②    | 043464 * | 1   | End panel, auxiliary water tank, engine frame    |  |
| ③    | 046555   | 14  | Rubber washer $\phi 30 \times \phi 8.5 \times 3$ |  |
| ④    | 000419   | 14  | Washer M8  |  |
| ⑤    | 011073   | 12  | Nyloc nut T M8                                   |  |
| ⑥    | 011093   | 2   | Spring washer M8                                 |  |
| ⑦    | 011011   | 2   | Setscrew HT M8 x 25                              |  |

\*. Used instead of one standard end panel if auxiliary water tank is fitted.

## Hydraulic oil tank mounting

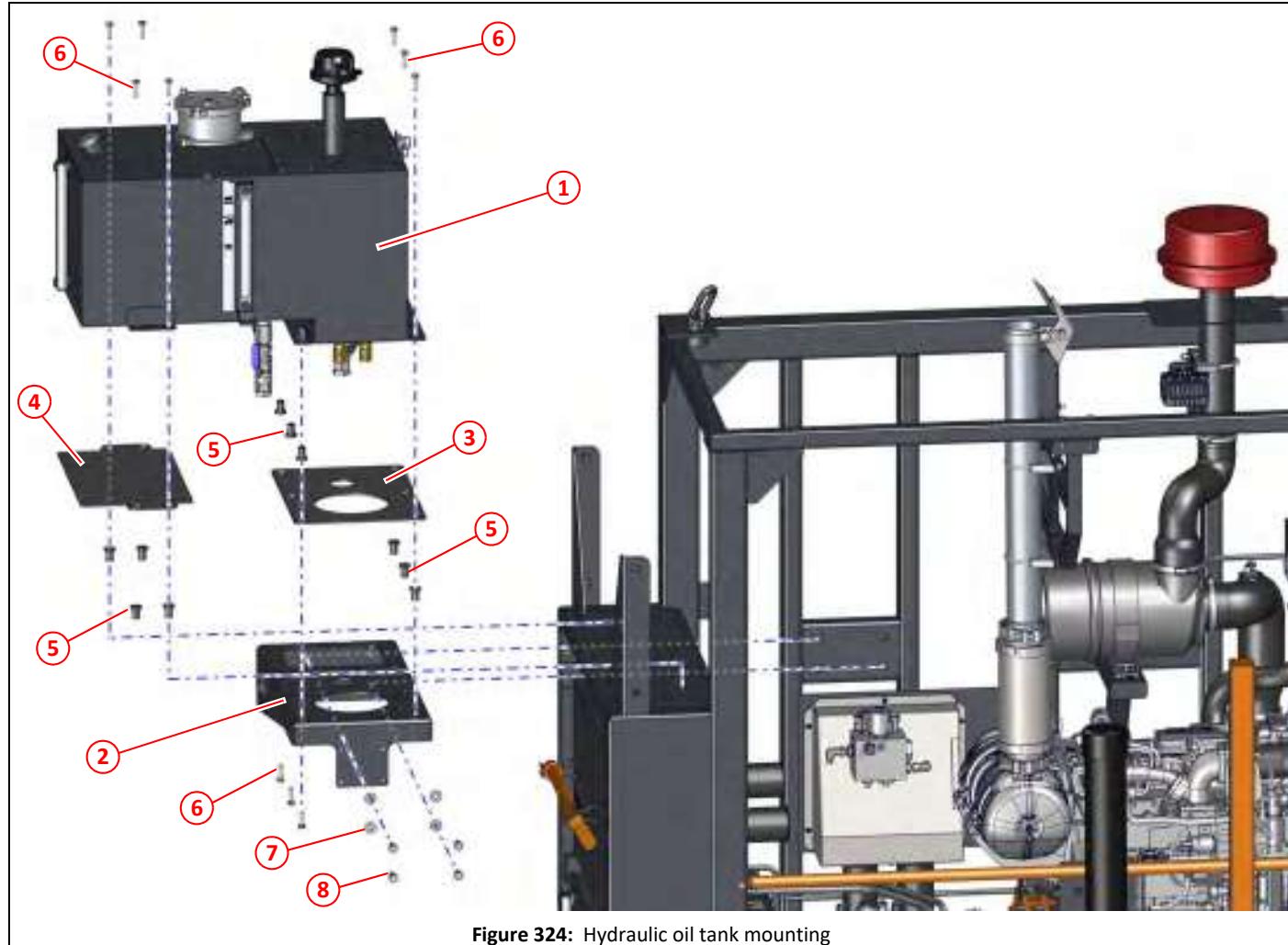
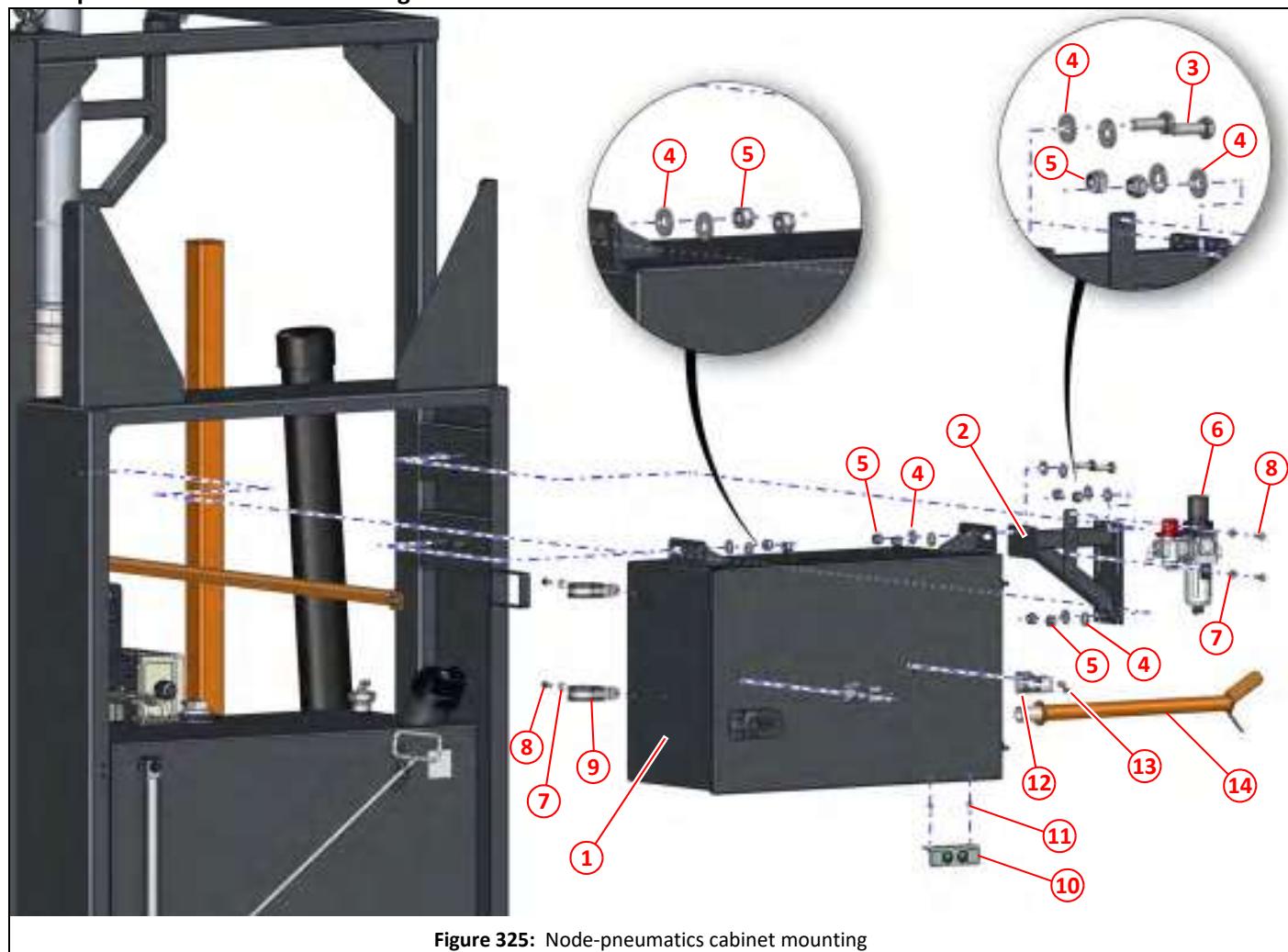


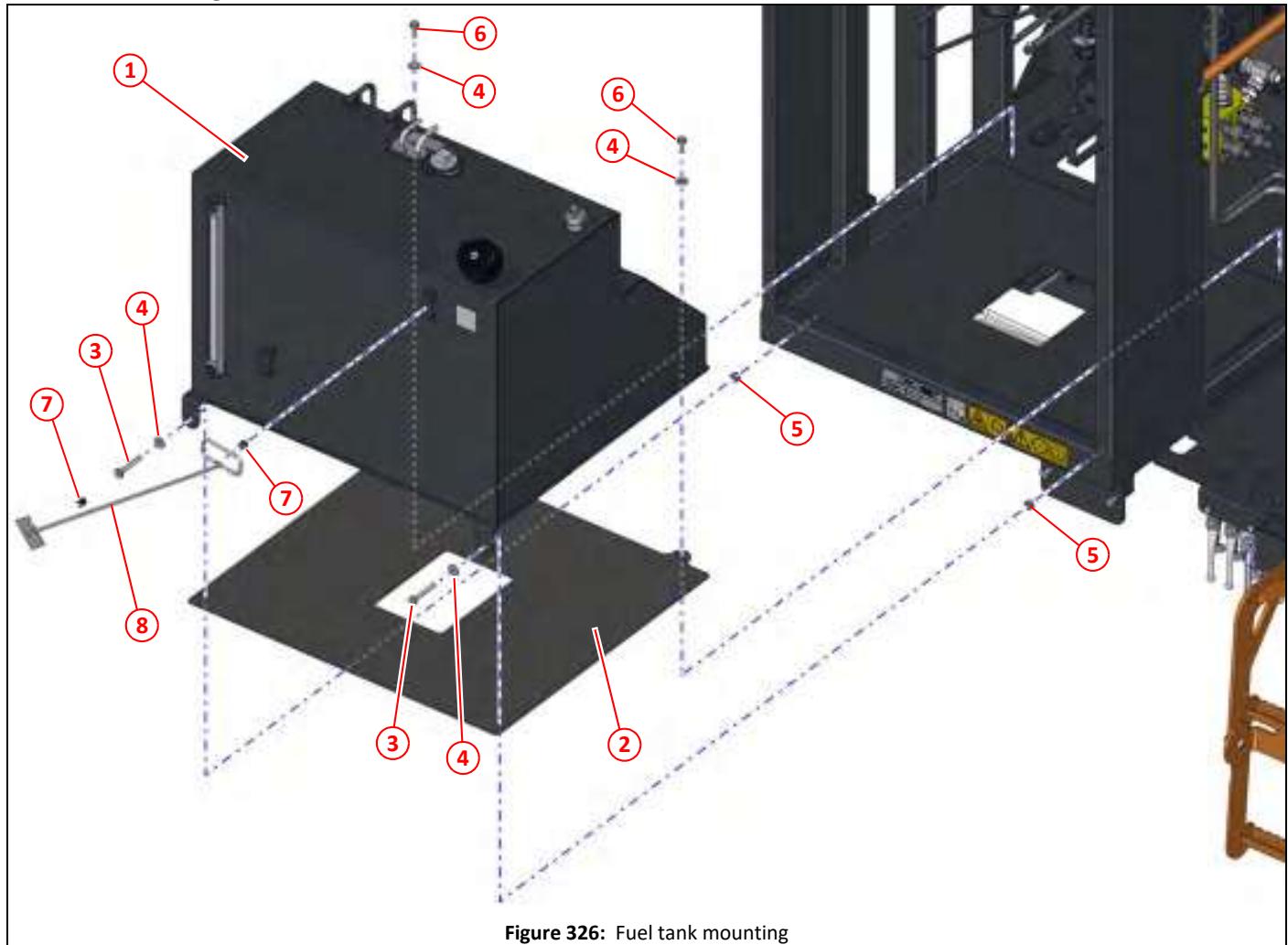
Figure 324: Hydraulic oil tank mounting

| Item | Part No | Qty | Description                         |
|------|---------|-----|-------------------------------------|
| ①    | 046940  | 1   | Hydraulic oil tank                  |
| ②    | 046941  | 1   | Oil tank bracket                    |
| ③    | 046942  | 1   | Mat 1, oil tank                     |
| ④    | 046943  | 1   | Mat 2, oil tank                     |
| ⑤    | 039932  | 10  | Flex-Loc anti-vibration fastener M8 |
| ⑥    | 011012  | 10  | Setscrew HT M8 x 30                 |
| ⑦    | 011094  | 4   | Washer M10                          |
| ⑧    | 011031  | 4   | Setscrew HT M10 x 25                |

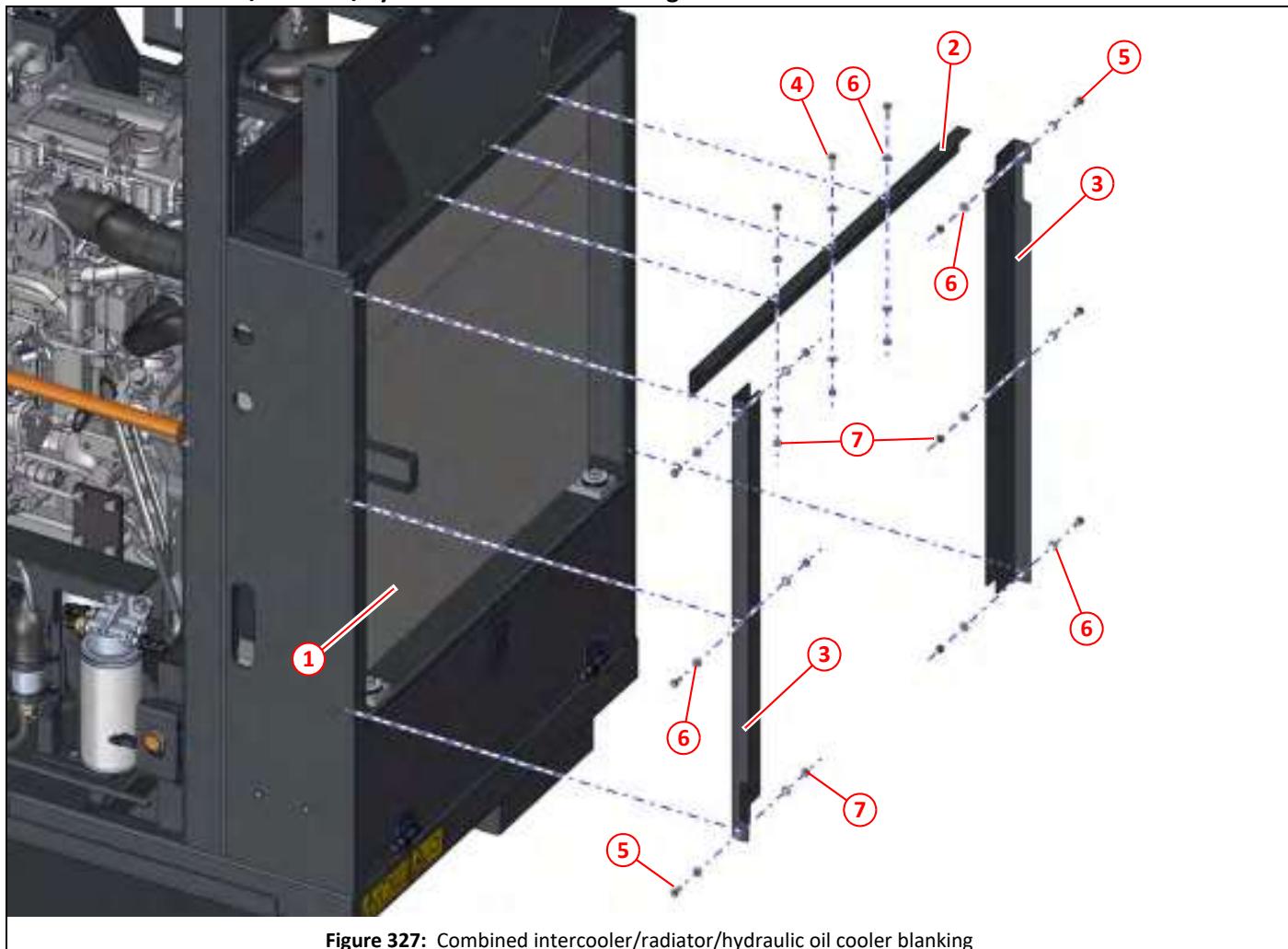
**Node-pneumatics cabinet mounting**

**Figure 325: Node-pneumatics cabinet mounting**

| Item | Part No | Qty | Description                         |
|------|---------|-----|-------------------------------------|
| (1)  |         | 1   | Node-pneumatics cabinet (HAF)       |
| (2)  | 046958  | 1   | Node-pneumatics cabinet support     |
| (3)  | 011032  | 2   | Setscrew HT M10 x 30                |
| (4)  | 011094  | 10  | Washer M10                          |
| (5)  | 011075  | 8   | Nyloc nut T M10                     |
| (6)  | 032519  | 1   | Air filter regulator AC30-MKK014    |
| (7)  | 011090  | 4   | Washer M6                           |
| (8)  | 011067  | 4   | Setscrew HT M6 x 20                 |
| (9)  | 005055  | 2   | Clip ø50 ID                         |
| (10) |         | 1   | Air purge controls                  |
| (11) | 000338  | 2   | Socket button head screw HD M6 x 16 |
| (12) | 014806  | 2   | Clip, broom                         |
| (13) | 011131  | 4   | Seal blind rivet ø4.8 x 18          |
| (14) | 039683  | 1   | Prop, hopper rear door              |

## Fuel tank mounting



| Item | Part No | Qty | Description          |                 |
|------|---------|-----|----------------------|-----------------|
| ①    | 046936  | 1   | Fuel tank assembly   | 260,261,262,263 |
| ②    | 046954  | 1   | Mat, fuel tank       |                 |
| ③    | 011037  | 2   | Bolt HT M10 x 65     |                 |
| ④    | 011094  | 4   | Washer M10           |                 |
| ⑤    | 011075  | 2   | Nyloc nut T M10      |                 |
| ⑥    | 011031  | 2   | Setscrew HT M10 x 25 |                 |
| ⑦    | 013631  | 2   | Fir tree clip        |                 |
| ⑧    | 013514  | 1   | Fan scraper          |                 |

**Combined intercooler/radiator/hydraulic oil cooler blanking**

**Figure 327: Combined intercooler/radiator/hydraulic oil cooler blanking**

| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    | 046549  | 1   | Combined intercooler/radiator/hydraulic oil cooler | 414 |
| ②    | 048697  | 1   | Blanking plate top, cooler                         |     |
| ③    | 047306  | 2   | Blanking plate side, cooler                        |     |
| ④    | 011067  | 3   | Setscrew HT M6 x 20                                |     |
| ⑤    | 011001  | 6   | Setscrew HT M6 x 16                                |     |
| ⑥    | 011090  | 18  | Washer M6  |     |
| ⑦    | 011071  | 9   | Nyloc nut T M6                                     |     |

## Combined intercooler/radiator/hydraulic oil cooler mounting

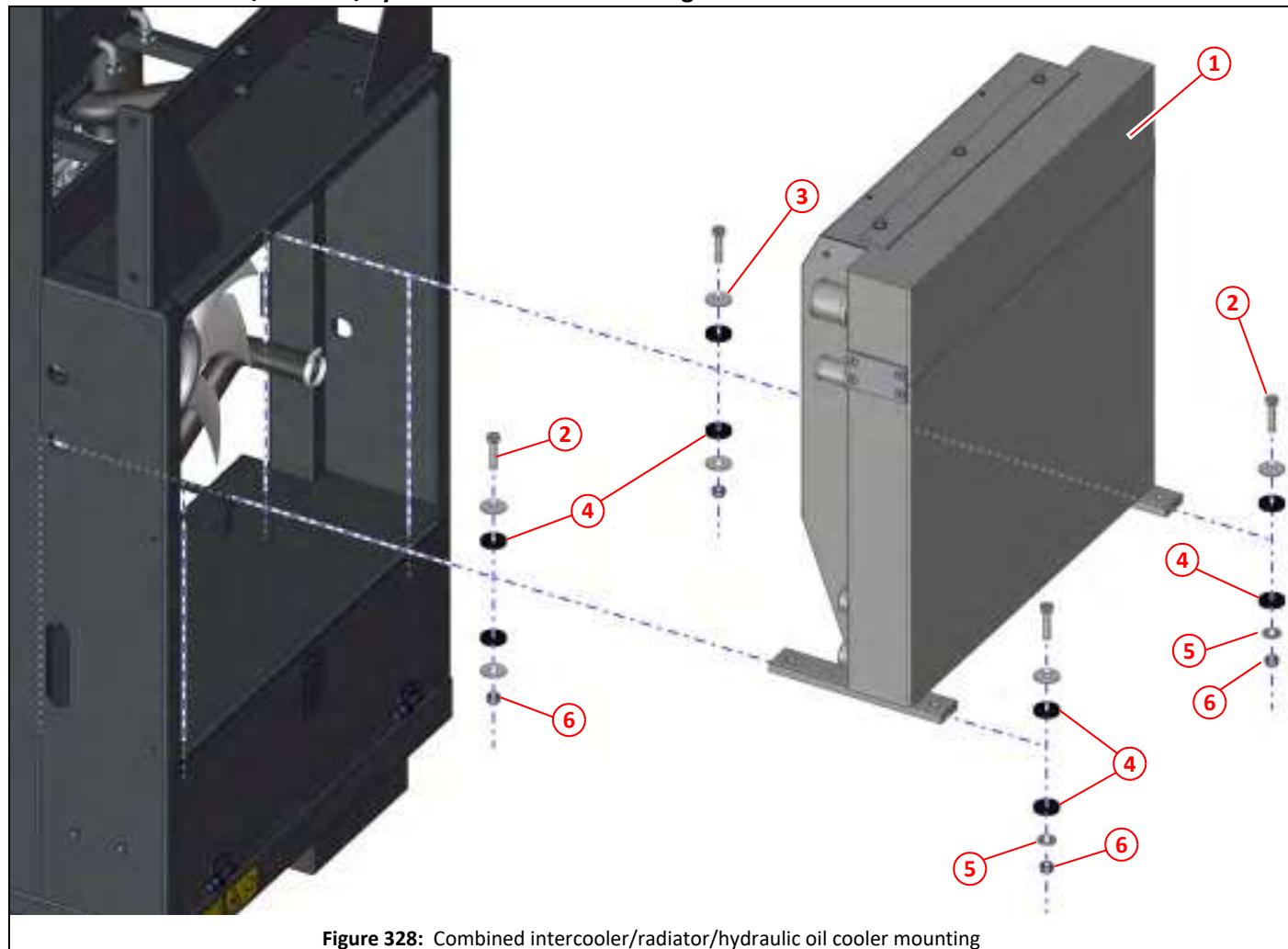
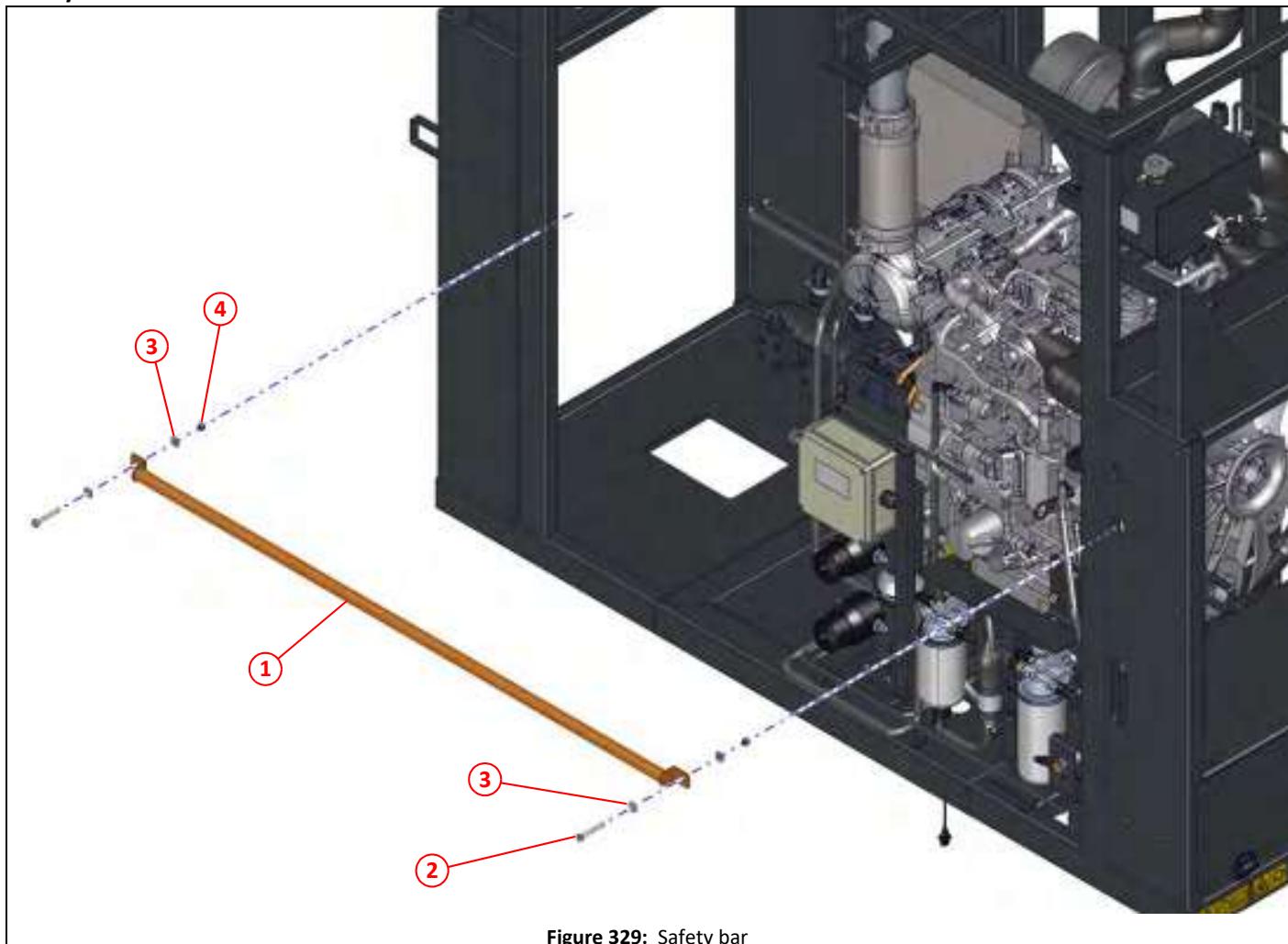


Figure 328: Combined intercooler/radiator/hydraulic oil cooler mounting

| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    | 046549  | 1   | Combined intercooler/radiator/hydraulic oil cooler | 414 |
| ②    | 000024  | 4   | Setscrew HT M12 x 50                               |     |
| ③    | 013448  | 6   | Washer ø40 x ø13 2                                 |     |
| ④    | 012969  | 8   | Rubber washer ø40 x ø12 x 6                        |     |
| ⑤    | 011096  | 2   | Washer M12   |     |
| ⑥    | 011077  | 4   | Nyloc nut T M12                                    |     |

**Safety bar**


| Item | Part No | Qty | Description              |  |
|------|---------|-----|--------------------------|--|
| ①    | 034800  | 1   | Safety bar, engine frame |  |
| ②    | 011017  | 2   | Bolt HT M8 x 60          |  |
| ③    | 011092  | 4   | Washer M8                |  |
| ④    | 011073  | 2   | Nyloc nut T M8           |  |

## Battery junction box and oil filter mounting

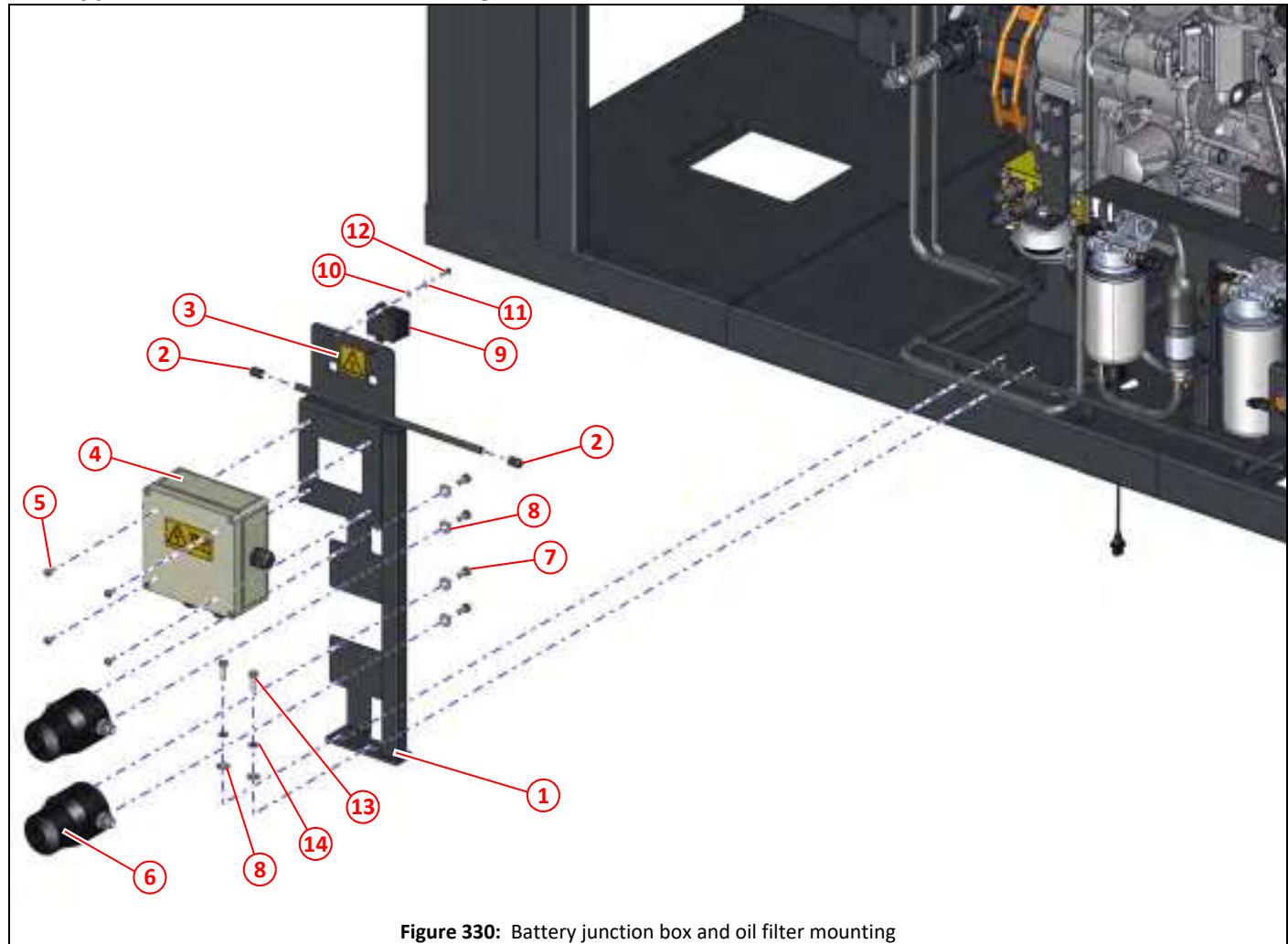
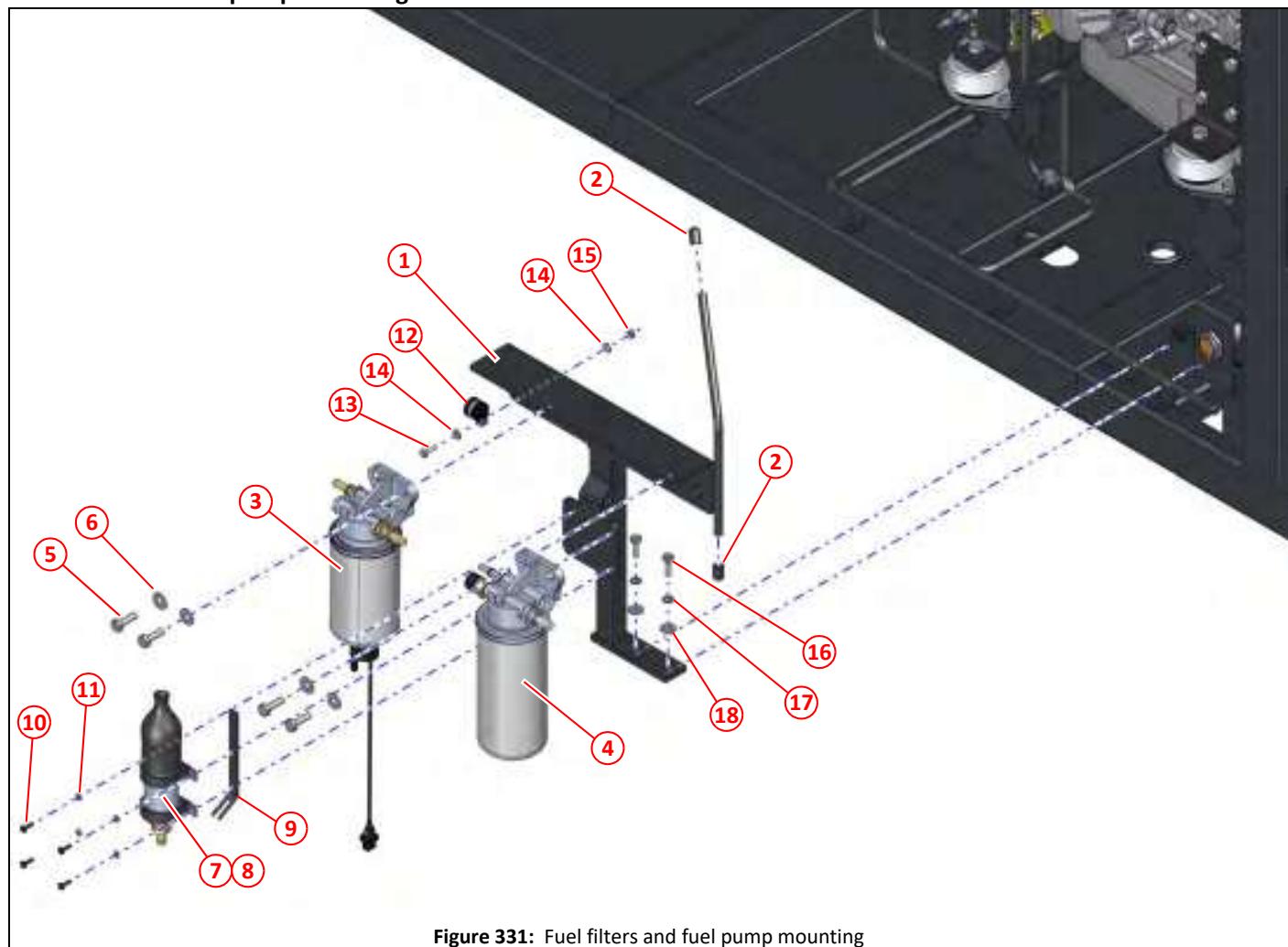


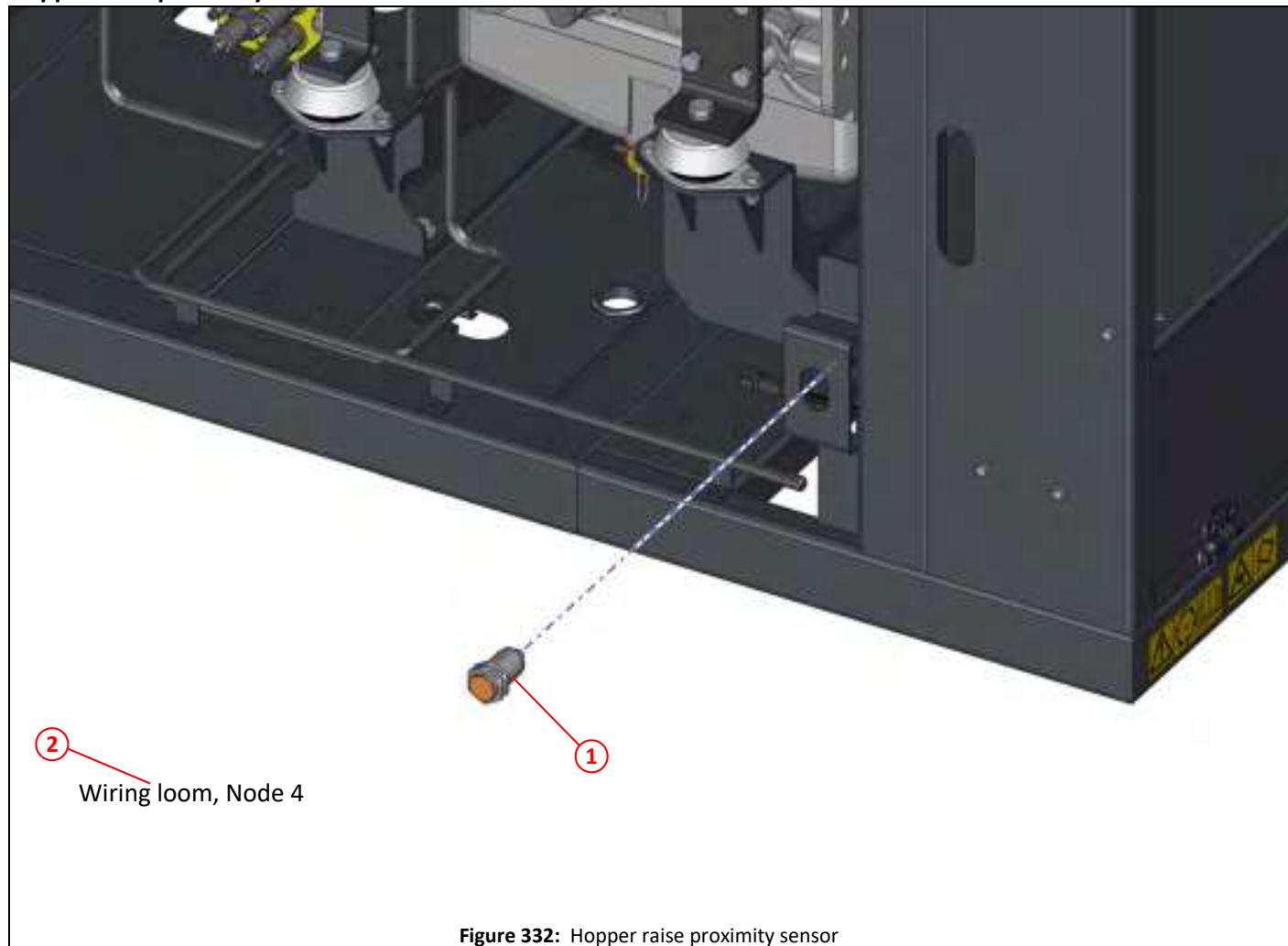
Figure 330: Battery junction box and oil filter mounting

| Item | Part No | Qty | Description                                     |
|------|---------|-----|---|
| ①    | 042957  | 1   | Mount, junction box                             |
| ②    | 043065  | 2   | Pipe cap ø12                                    |
| ③    | 043266  | 1   | Label - Warning - Electrical                    |
| ④    | 043350  | 1   | Battery junction box                            |
| ⑤    | 011110  | 4   | Pan head screw M6 x 16                          |
| ⑥    | 025103  | 2   | Filter, oil, high pressure                      |
| ⑦    | 011010  | 4   | Setscrew HT M8 x 20                             |
| ⑧    | 011092  | 6   | Washer M8                                       |
| ⑨    | 036844  | 1   | Power connection link, black                    |
| ⑩    | 000410  | 1   | Washer M5                                       |
| ⑪    | 000411  | 1   | Spring washer M5                                |
| ⑫    | 000381  | 1   | Socket dome head screw M5 x 20, stainless steel |
| ⑬    | 011011  | 2   | Setscrew HT M8 x25                              |
| ⑭    | 011093  | 2   | Spring washer M8                                |

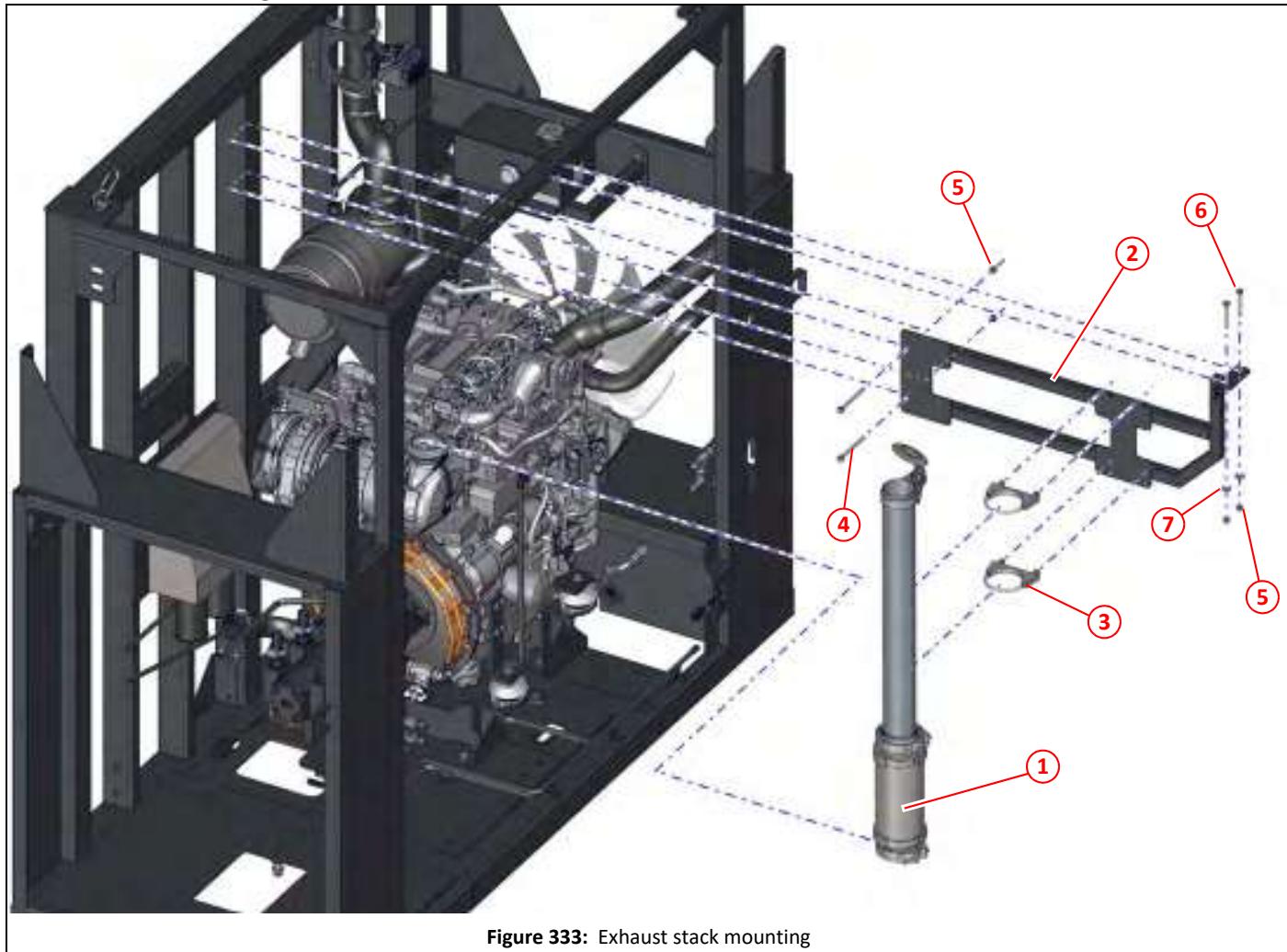
**Fuel filters and fuel pump mounting**

**Figure 331: Fuel filters and fuel pump mounting**

| Item | Part No | Qty | Description                                 |     |
|------|---------|-----|---|-----|
| ①    | 042955  | 1   | Mounting bracket, fuel system, engine frame |     |
| ②    | 043065  | 2   | Pipe cap ø12                                |     |
| ③    | 042234  | 1   | Fuel filter, primary                        | 409 |
| ④    | 043786  | 1   | Fuel filter, secondary                      | 409 |
| ⑤    | 011032  | 4   | Setscrew HT M10 x 30                        |     |
| ⑥    | 011094  | 4   | Washer M10                                  |     |
| ⑦    | 044515  | 1   | Fuel lift pump, 12V                         | 409 |
| ⑧    | 043370  | 1   | Fuel lift pump, 24V                         | 409 |
| ⑨    | 043193  | 1   | Fuel filter connector bracket               |     |
| ⑩    | 000234  | 4   | Pan head Pozidriv setscrew M5 x 16, black   |     |
| ⑪    | 000410  | 4   | Washer M5                                   |     |
| ⑫    | 000200  | 1   | Clip ø18, rubber sleeved                    |     |
| ⑬    | 011067  | 1   | Setscrew HT M6 x 20                         |     |
| ⑭    | 011090  | 2   | Washer M6                                   |     |
| ⑮    | 011071  | 1   | Nyloc nut T M6                              |     |
| ⑯    | 011011  | 2   | Setscrew HT M8 x 25                         |     |
| ⑰    | 011093  | 2   | Spring Washer M8                            |     |
| ⑱    | 011092  | 2   | Washer M8                                   |     |

## Hopper raise proximity sensor

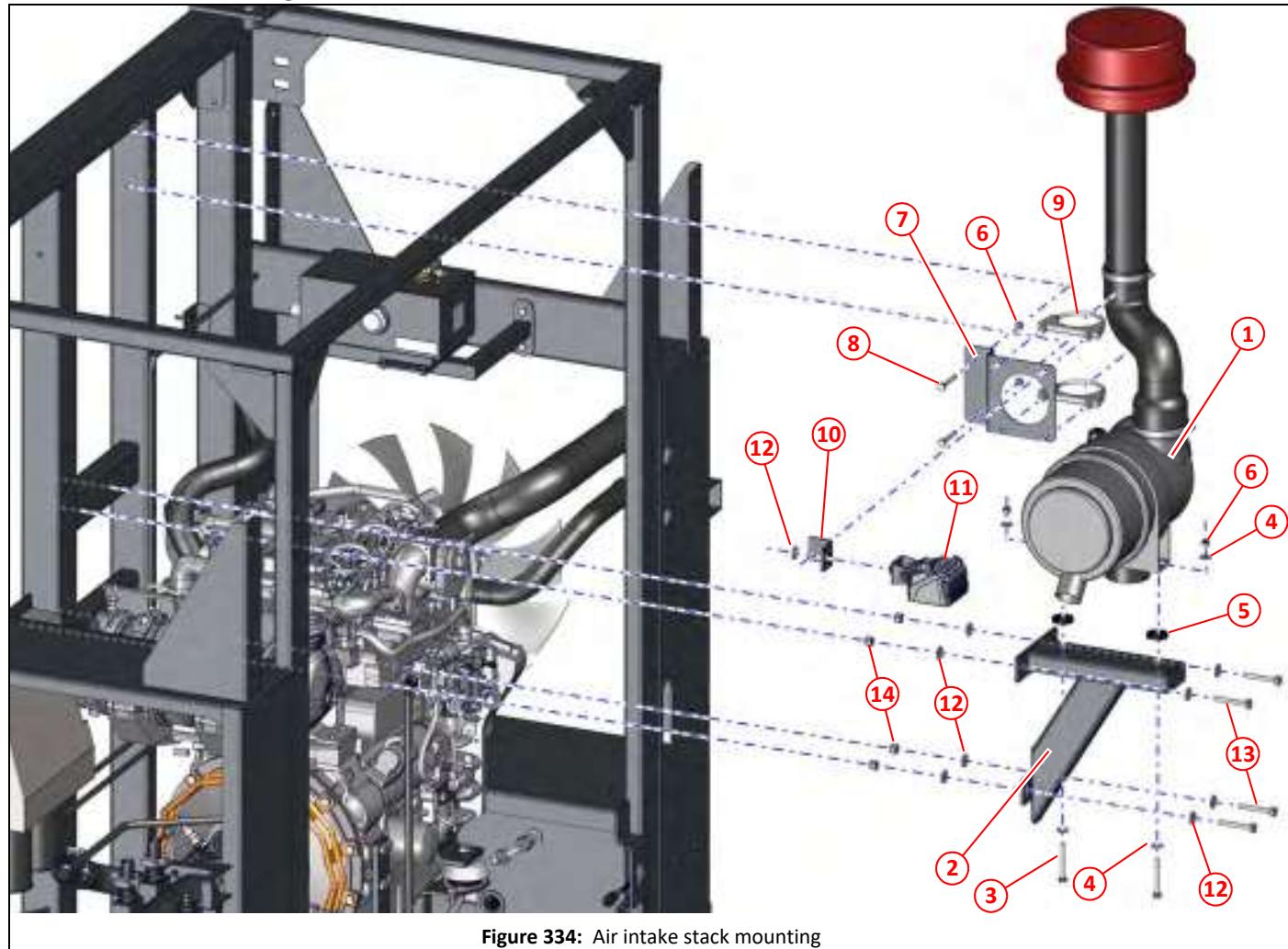


| Item | Part No | Qty | Description                   |
|------|---------|-----|-------------------------------|
| ①    | 032627  | 1   | Hopper raise proximity sensor |
| ②    | 047384  | 1   | Wiring loom, Node 4           |

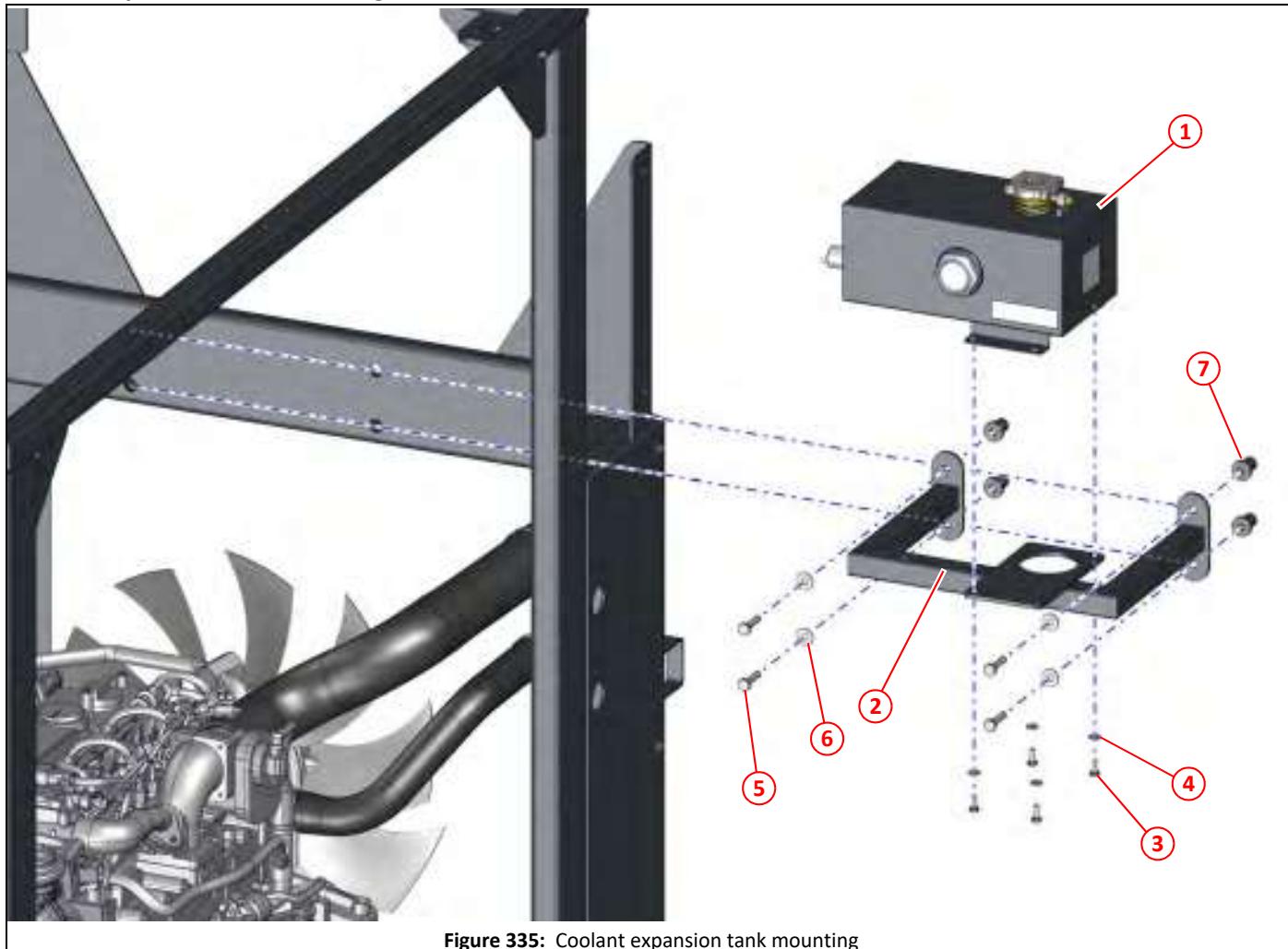
**Exhaust stack mounting**

**Figure 333: Exhaust stack mounting**

| Item | Part No | Qty | Description                                  |     |
|------|---------|-----|--|-----|
| ①    |         | 1   | Exhaust stack                                | 410 |
| ②    | 046944  | 1   | Support bracket, exhaust stack, engine frame |     |
| ③    | 036831  | 2   | U clamp, exhaust, ø83                        |     |
| ④    | 011020  | 2   | Bolt M8 x 80                                 |     |
| ⑤    | 011073  | 4   | Nyloc nut T M8                               |     |
| ⑥    | 011017  | 2   | Bolt HT M8 x 60                              |     |
| ⑦    | 011092  | 2   | Washer M8                                    |     |

## Air intake stack mounting



| Item | Part No | Qty | Description                   |         |
|------|---------|-----|-------------------------------|---------|
| ①    |         | 1   | Air intake stack              | 411,412 |
| ②    | 042920  | 1   | Mounting bracket, air cleaner |         |
| ③    | 011018  | 2   | Bolt HT M8 x 70               |         |
| ④    | 011092  | 4   | Washer M8                     |         |
| ⑤    | 012969  | 2   | Rubber washer ø40 x ø12 x 6   |         |
| ⑥    | 011073  | 4   | Nyloc nut T M8                |         |
| ⑦    | 046948  | 1   | Bracket, air stack            |         |
| ⑧    | 000009  | 2   | Bolt HT M8 x 55               |         |
| ⑨    | 036831  | 2   | U clamp, exhaust, ø83         |         |
| ⑩    | 012548  | 1   | Angle bracket                 |         |
| ⑪    | 047757  | 1   | Work lamp, 18W 10-32V         |         |
| ⑫    | 011094  | 9   | Washer M10                    |         |
| ⑬    | 011037  | 4   | Bolt HT M10 x 65              |         |
| ⑭    | 011075  | 4   | Nyloc nut T M10               |         |

**Coolant expansion tank mounting**


| Item | Part No | Qty | Description                              |     |
|------|---------|-----|--|-----|
| ①    | 041936  | 1   | Coolant expansion tank                   | 413 |
| ②    | 046946  | 1   | Mounting bracket, coolant expansion tank |     |
| ③    | 011001  | 4   | Setscrew HT M6 x 16                      |     |
| ④    | 011090  | 4   | Washer M6                                |     |
| ⑤    | 011013  | 4   | Setscrew HT M8 x35                       |     |
| ⑥    | 011092  | 4   | Washer M8                                |     |
| ⑦    | 039932  | 4   | Flex-Loc anti-vibration fastener M8      |     |

## Remote mounted flow control valve mounting

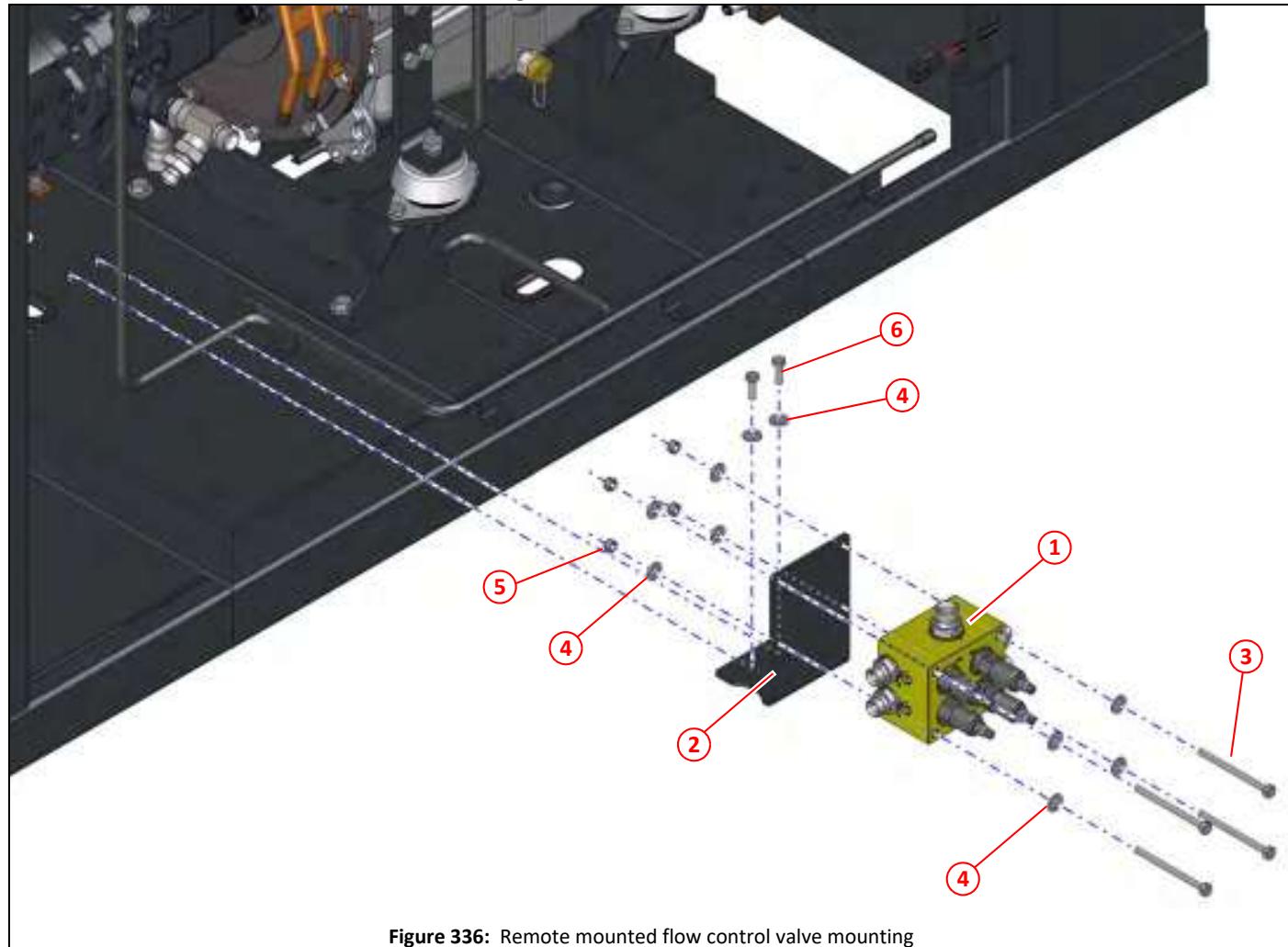
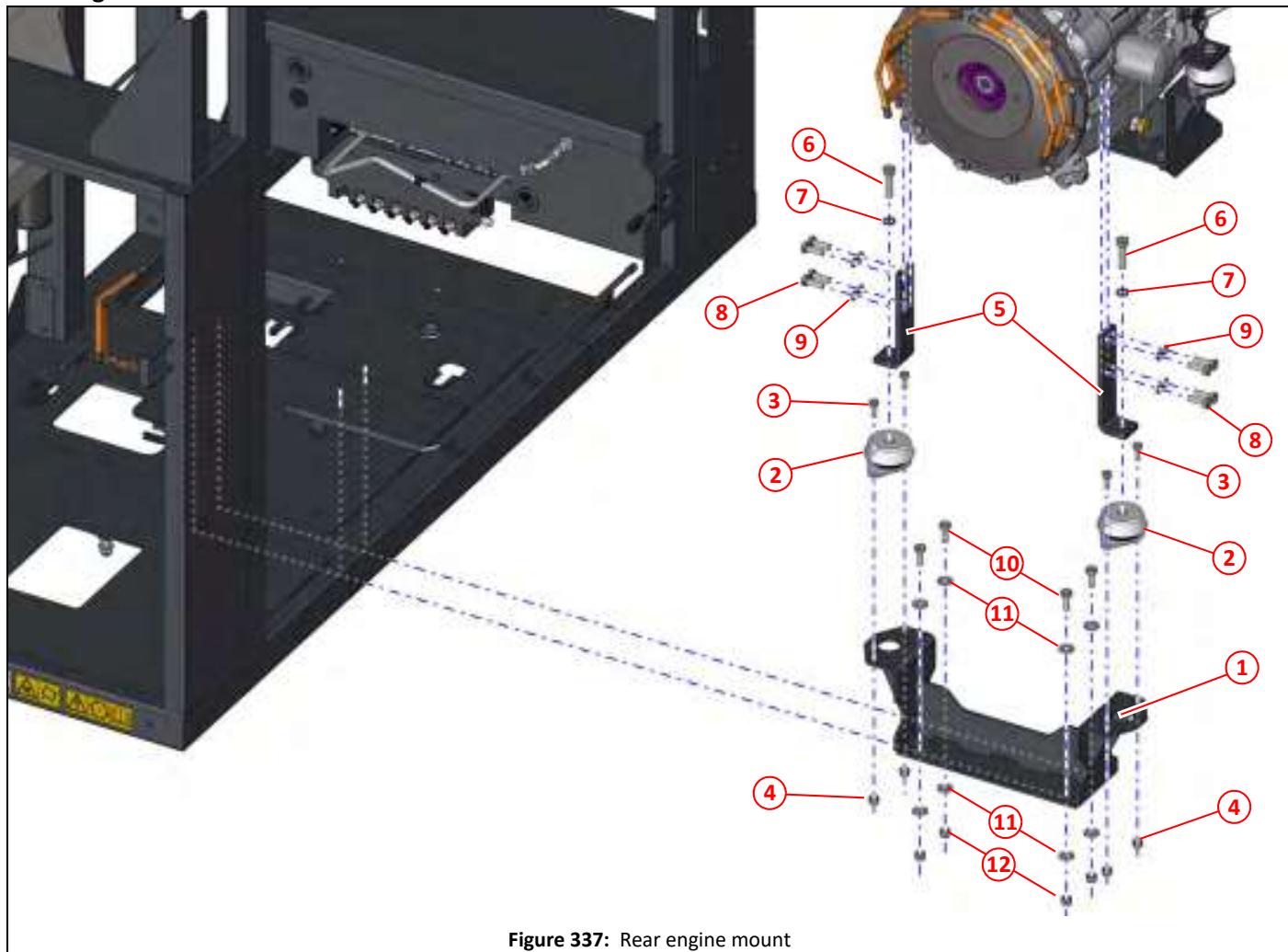


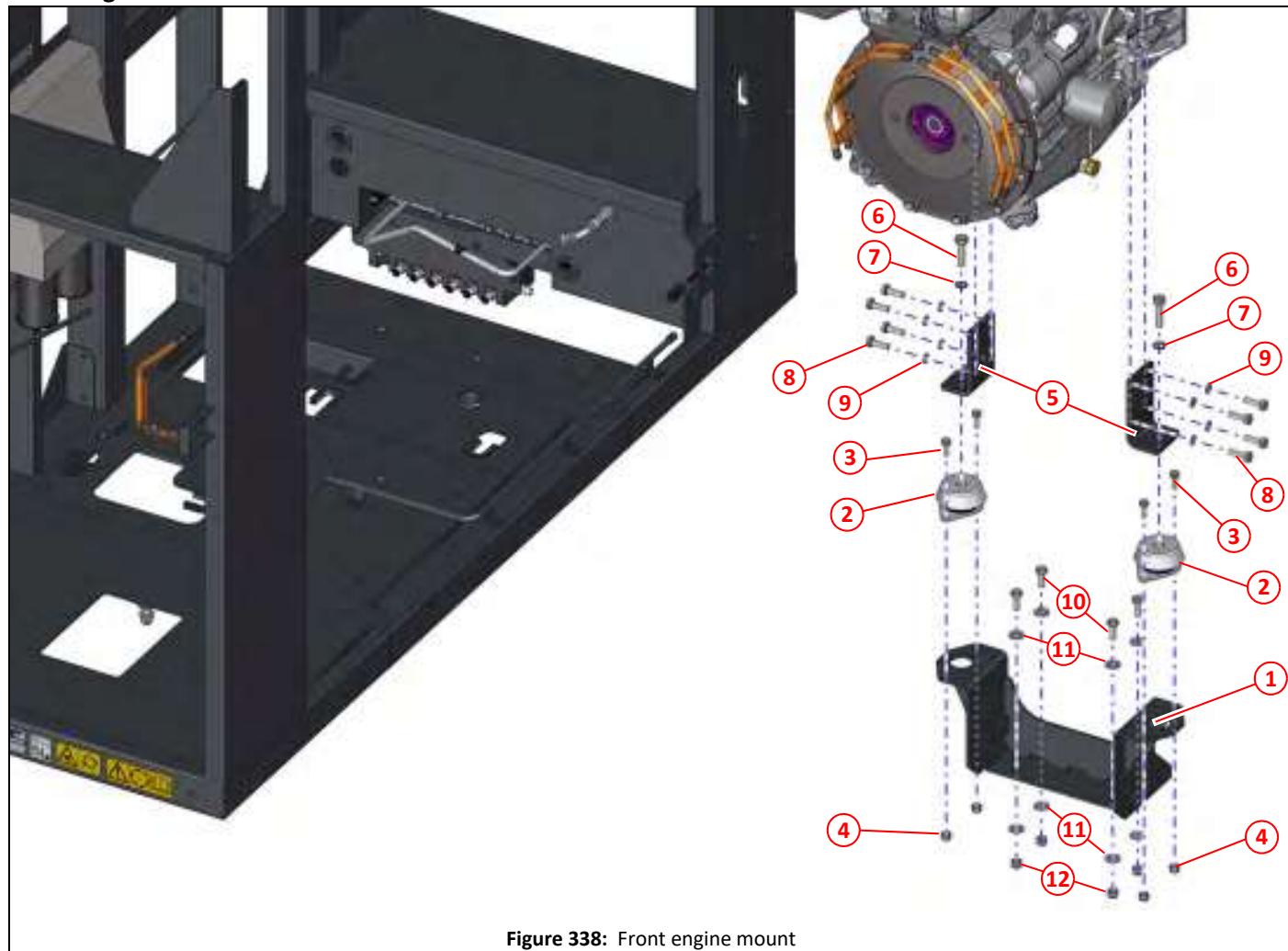
Figure 336: Remote mounted flow control valve mounting

| Item | Part No | Qty | Description                                      |         |
|------|---------|-----|--|---------|
| ①    | 038513  | 1   | Remote mounted flow control valve assembly, dual | 269,270 |
| ②    | 046973  | 1   | Bracket, Remote mounted flow control             |         |
| ③    | 011020  | 4   | Bolt M8 x 80                                     |         |
| ④    | 011092  | 10  | Washer M8  |         |
| ⑤    | 011073  | 4   | Nyloc nut T M8                                   |         |
| ⑥    | 011011  | 2   | Setscrew HT M8 x25                               |         |

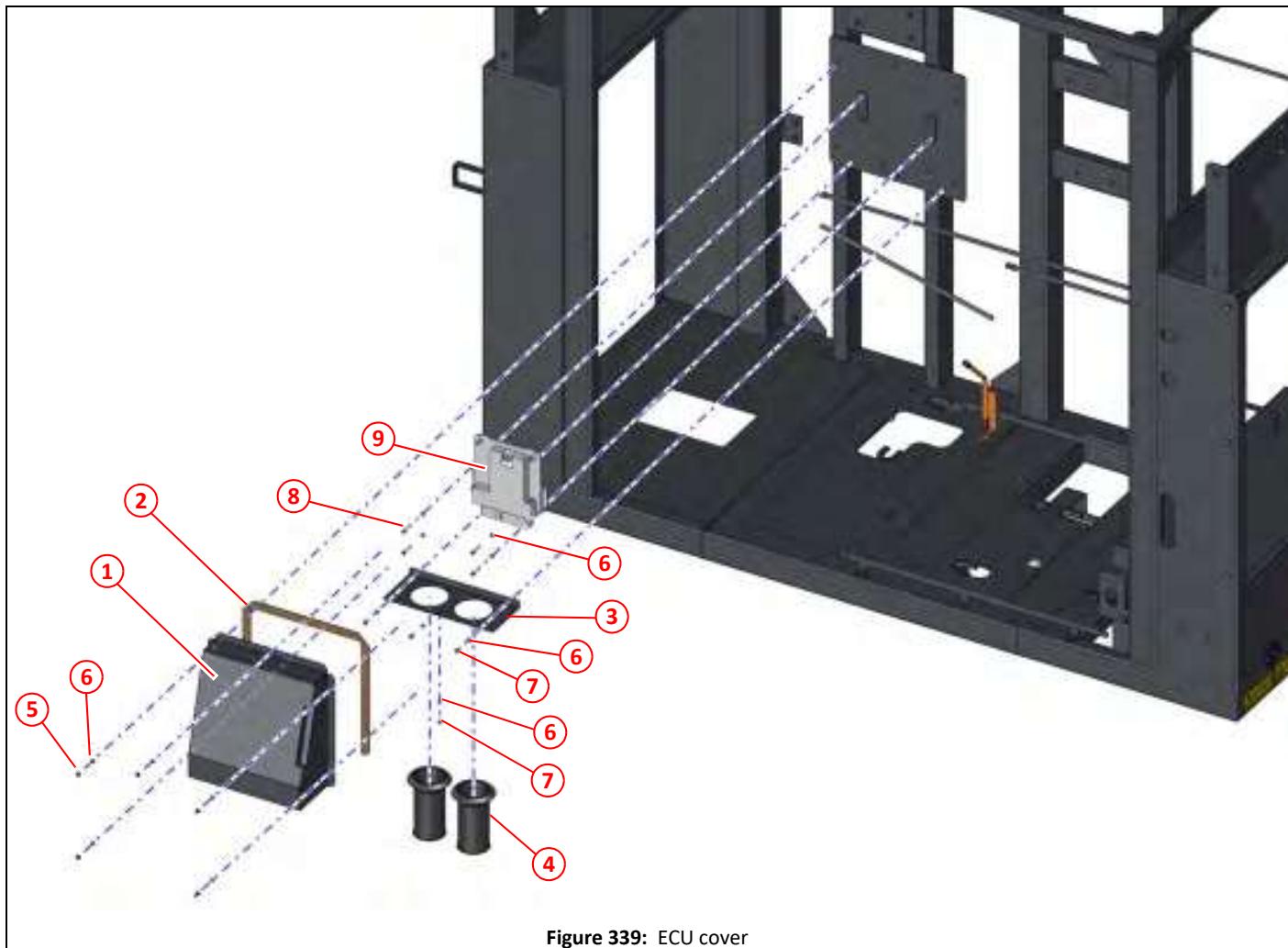
**Rear engine mount**

**Figure 337: Rear engine mount**

| Item | Part No | Qty | Description           |     |
|------|---------|-----|-----------------------|-----|
| ①    | 042810  | 1   | Engine cradle, rear   | 399 |
| ②    | 030724  | 2   | Engine mount          | 400 |
| ③    | 011031  | 4   | Setscrew HT M10 x25   |     |
| ④    | 011075  | 4   | Nyloc nut T M10       |     |
| ⑤    | 042811  | 2   | Engine mounting, rear | 400 |
| ⑥    | 011403  | 2   | Bolt M14 x 50         |     |
| ⑦    | 011106  | 2   | Spring washer M14     |     |
| ⑧    | 011053  | 8   | Setscrew HT M12 x 35  |     |
| ⑨    | 011097  | 8   | Spring washer M12     |     |
| ⑩    | 011052  | 4   | Setscrew HT M12 x 30  |     |
| ⑪    | 011096  | 8   | Washer M12            |     |
| ⑫    | 011075  | 4   | Nyloc nut T M10       |     |

## Front engine mount



| Item | Part No | Qty | Description            |     |
|------|---------|-----|------------------------|-----|
| ①    | 042810  | 1   | Engine cradle, rear    | 399 |
| ②    | 030724  | 2   | Engine mount           | 400 |
| ③    | 011031  | 4   | Setscrew HT M10 x25    |     |
| ④    | 011075  | 4   | Nyloc nut T M10        |     |
| ⑤    | 042808  | 2   | Engine mounting, front | 400 |
| ⑥    | 011403  | 2   | Bolt M14 x 50          |     |
| ⑦    | 011106  | 2   | Spring washer M14      |     |
| ⑧    | 011053  | 8   | Setscrew HT M12 x 35   |     |
| ⑨    | 011097  | 8   | Spring washer M12      |     |
| ⑩    | 011052  | 4   | Setscrew HT M12 x 30   |     |
| ⑪    | 011096  | 8   | Washer M12             |     |
| ⑫    | 011075  | 4   | Nyloc nut T M10        |     |

**ECU cover**


| Item | Part No  | Qty | Description  |     |
|------|----------|-----|--|-----|
| ①    | 042981   | 1   | ECU cover  |     |
| ②    | 042982   | 1   | Gasket, ECU cover                                      |     |
| ③    | 043302   | 1   | Sock mount panel                                       |     |
| ④    | 034807   | 2   | Panel sock   |     |
| ⑤    | 000155   | 5   | Nyloc nut M5   |     |
| ⑥    | 000410   | 13  | Washer M5  |     |
| ⑦    | 000097   | 4   | Bolt M5 x 12   |     |
| ⑧    | 000118   | 4   | Socket cap head screw M5 x 30                          |     |
| ⑨    | 046220 * | 1   | ECU, DEUTZ engine 3.6 (Stage V), for both 12V and 24V. | 408 |

\*. The ECU will need to be matched to the serial number of the DEUTZ auxiliary engine of your vehicle.

## Hydraulic cabinet

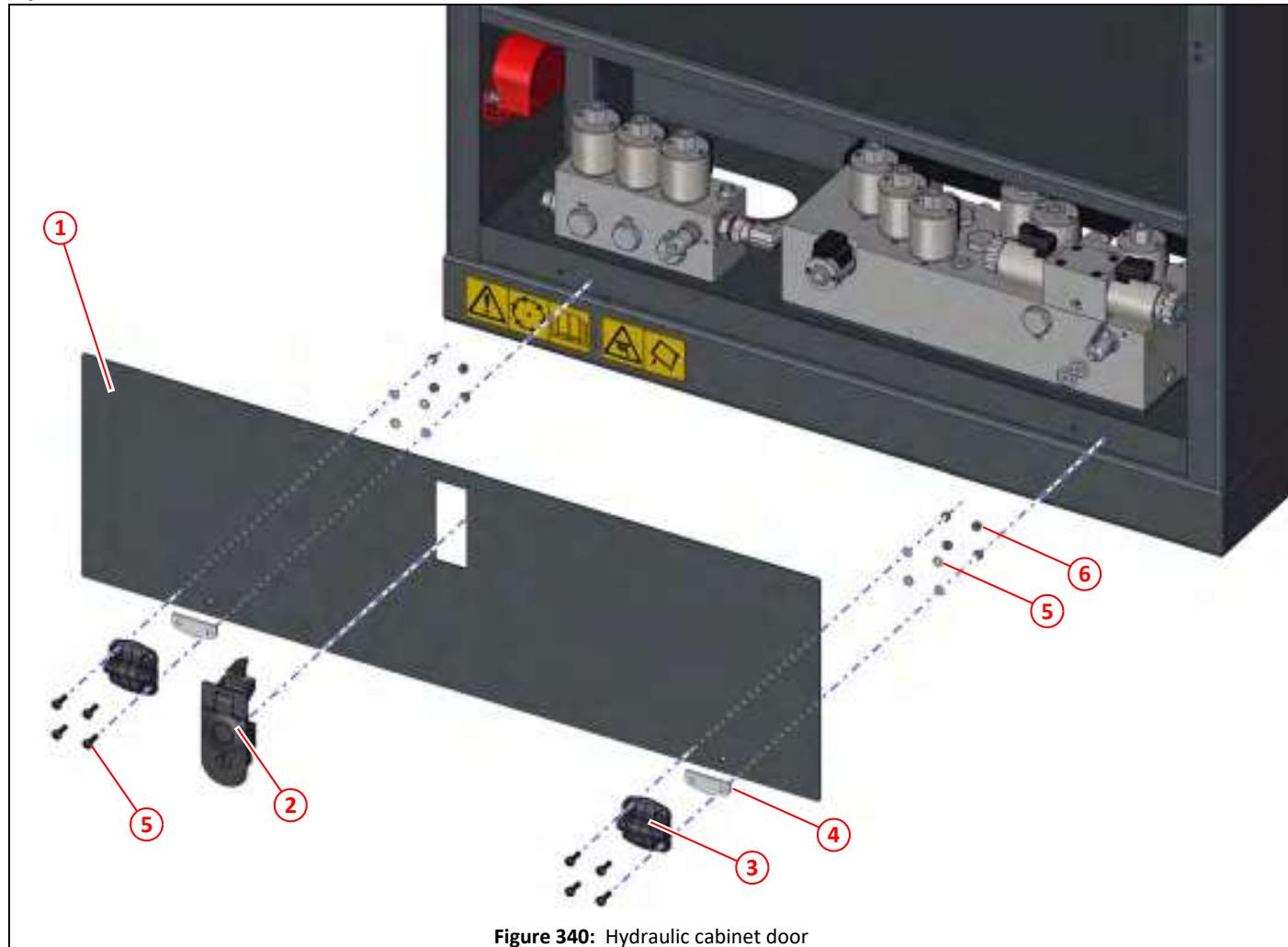


Figure 340: Hydraulic cabinet door

| Item | Part No | Qty | Description                                |
|------|---------|-----|--|
| ①    | 043078  | 1   | Door, hydraulic cabinet                    |
| ②    | 033634  | 1   | Latch, sealed                              |
| ③    | 027193  | 2   | Hinge, door, plastic                       |
| ④    | 028320  | 2   | Packer, hinge                              |
| ⑤    | 000234  | 8   | Pan head Pozidrive setscrew M5 x 16, black |
| ⑥    | 000410  | 8   | Washer M5                                  |
| ⑦    | 000155  | 8   | Nyloc nut M5                               |

## Main and options valve blocks mounting

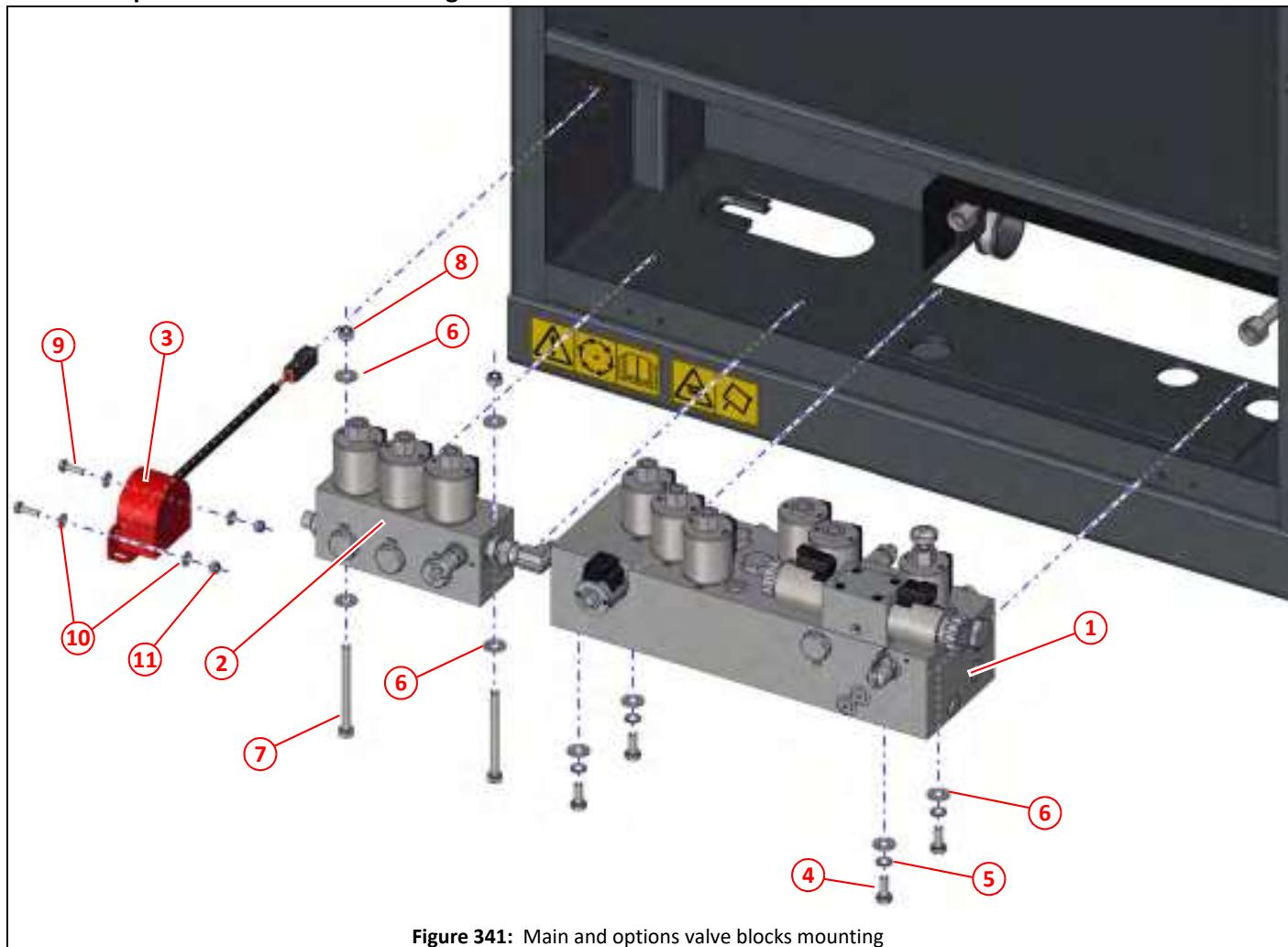
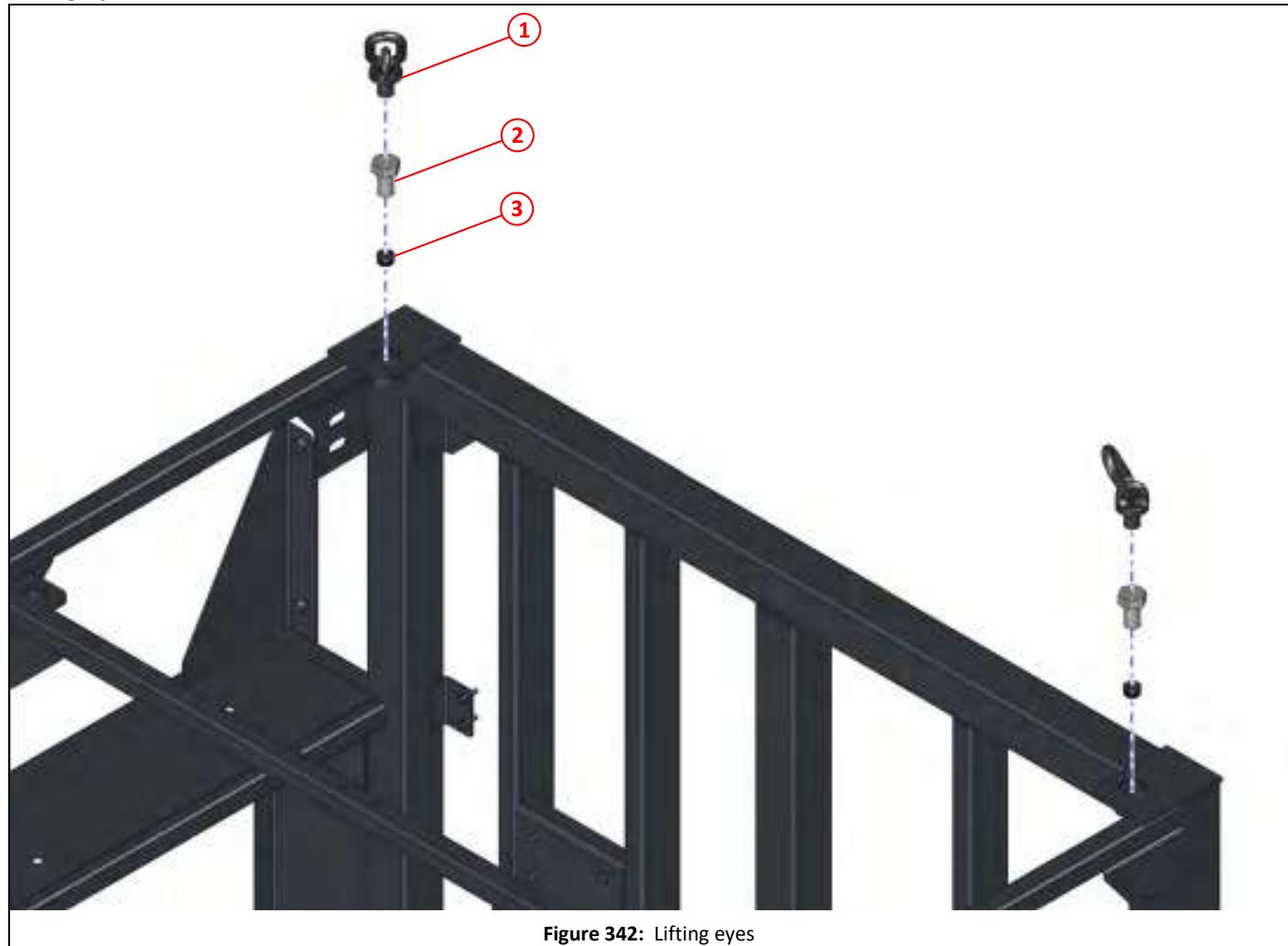


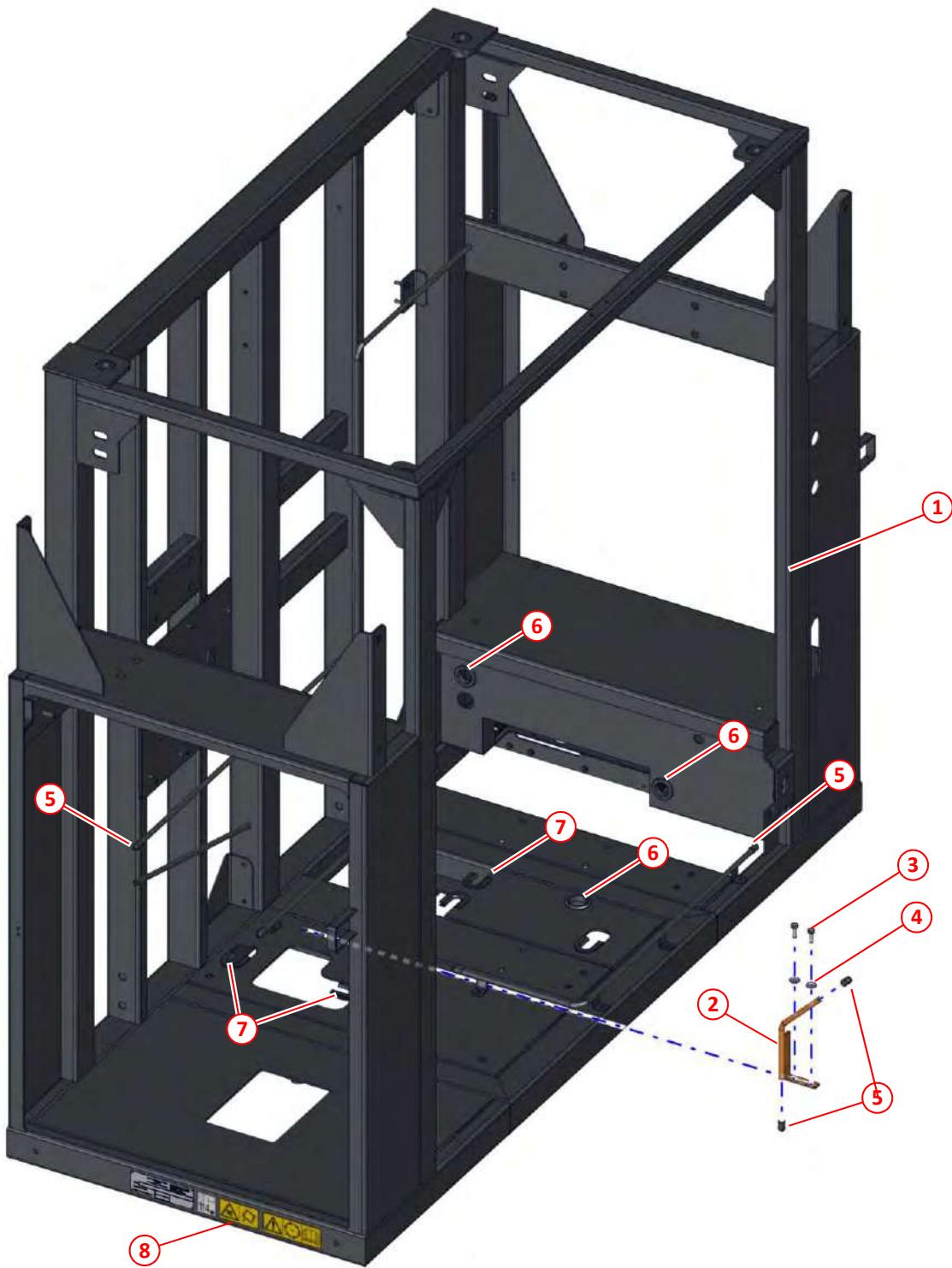
Figure 341: Main and options valve blocks mounting

| Item | Part No | Qty | Description                                       |     |
|------|---------|-----|---|-----|
| ①    |         | 1   | Main valve block                                  | 275 |
| ②    |         | 1   | Options valve block                               | 279 |
| ③    | 037666  | 1   | Sounder, hopper/door operation, complete assembly |     |
| ④    | 011010  | 4   | Setscrew HT M8 x20                                |     |
| ⑤    | 011093  | 4   | Spring Washer M8                                  |     |
| ⑥    | 011092  | 8   | Washer M8   |     |
| ⑦    | 011019  | 2   | Bolt HT M8 x 90                                   |     |
| ⑧    | 011073  | 2   | Nyloc nut T M8                                    |     |
| ⑨    | 011067  | 2   | Setscrew HT M6 x 20                               |     |
| ⑩    | 011090  | 4   | Washer M6   |     |
| ⑪    | 011071  | 2   | Nyloc nut T M6                                    |     |

## Lifting eyes



| Item | Part No | Qty | Description                 |
|------|---------|-----|-----------------------------|
| ①    | 035941  | 2   | Linked eyebolt 1.6T         |
| ②    | 000430  | 2   | Screw M24 x 40, zinc plated |
| ③    | 026173  | 2   | Plastic plug ø25.4 (black)  |

**Engine frame and ancillary parts**

**Figure 343:** Engine frame and ancillary parts

| Item | Part No | Qty    | Description   |     |
|------|---------|--------|---|-----|
| ①    | 046932  | 1      | Engine frame, front subframe  |     |
| ②    | 046955  | 1      | Lower loom rail 3   |     |
| ③    | 011011  | 2      | Setscrew HT M8 x 25   |     |
| ④    | 011092  | 2      | Washer M8   |     |
| ⑤    | 043065  | As req | Pipe cap ø12, various locations on engine frame                                   |     |
| ⑥    | 022257  | 3      | Grommet ø40 x ø50 x 4   |     |
| ⑦    | 005073  | As req | Safety edging, TITANFAST MET106, cut to length, various locations on engine frame |     |
| ⑧    |         |        | Labels  | 430 |

## Subframe

## Engine frame and subframe general arrangement

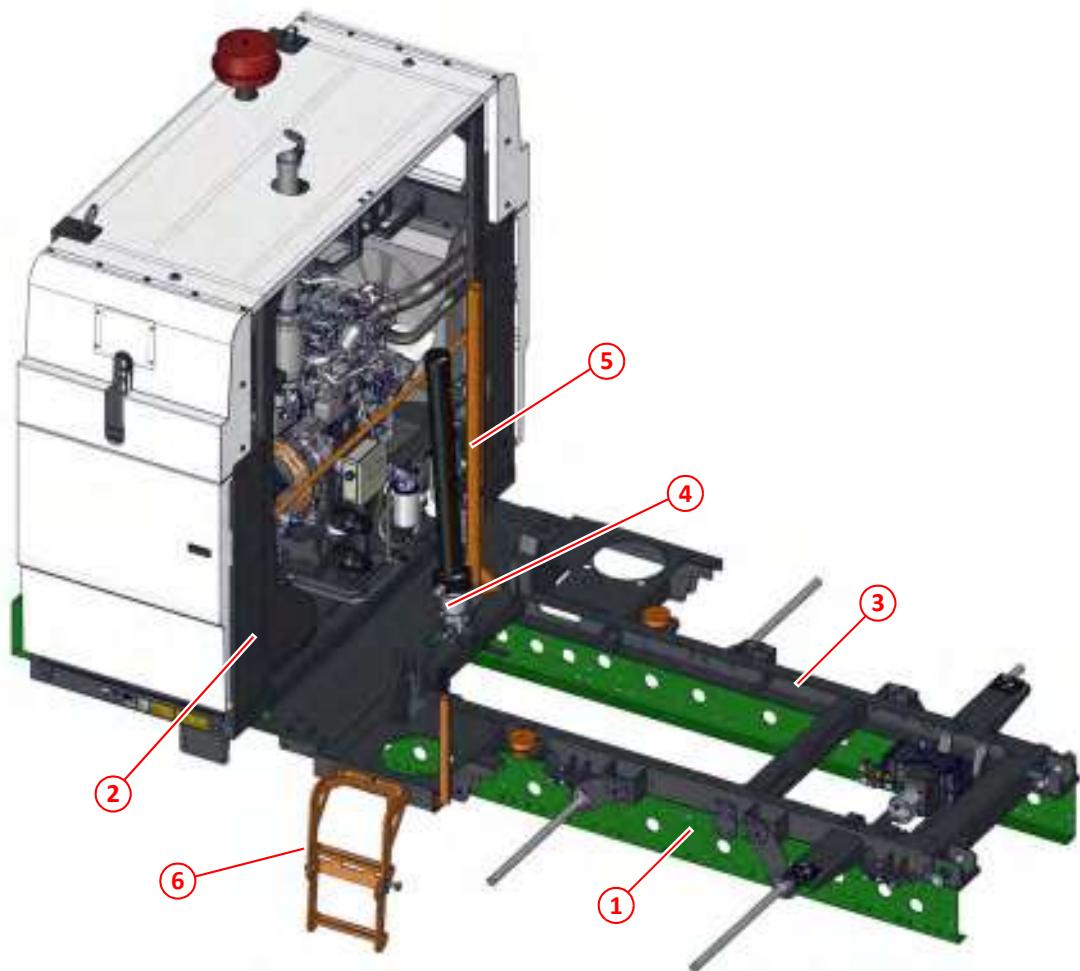
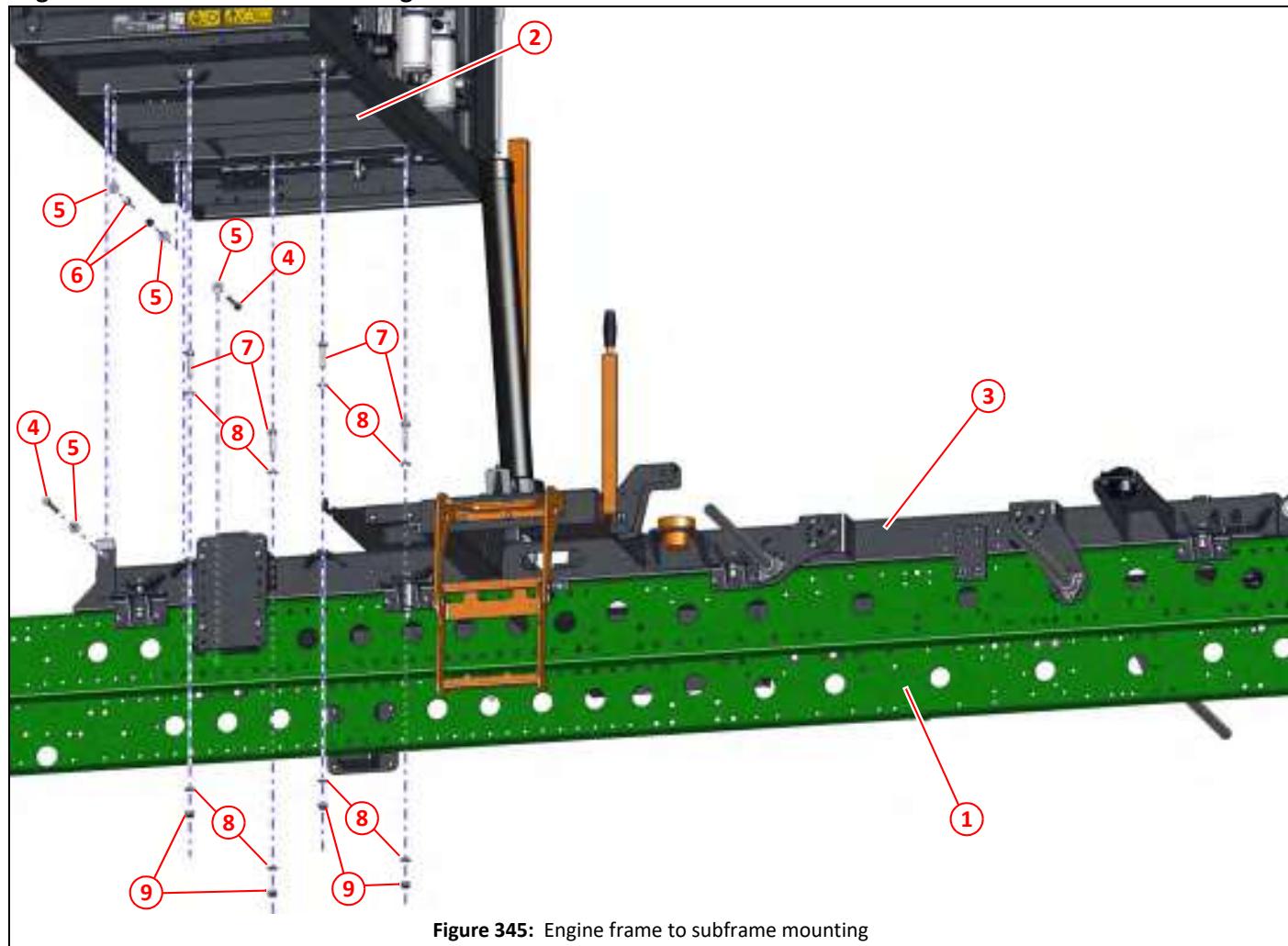


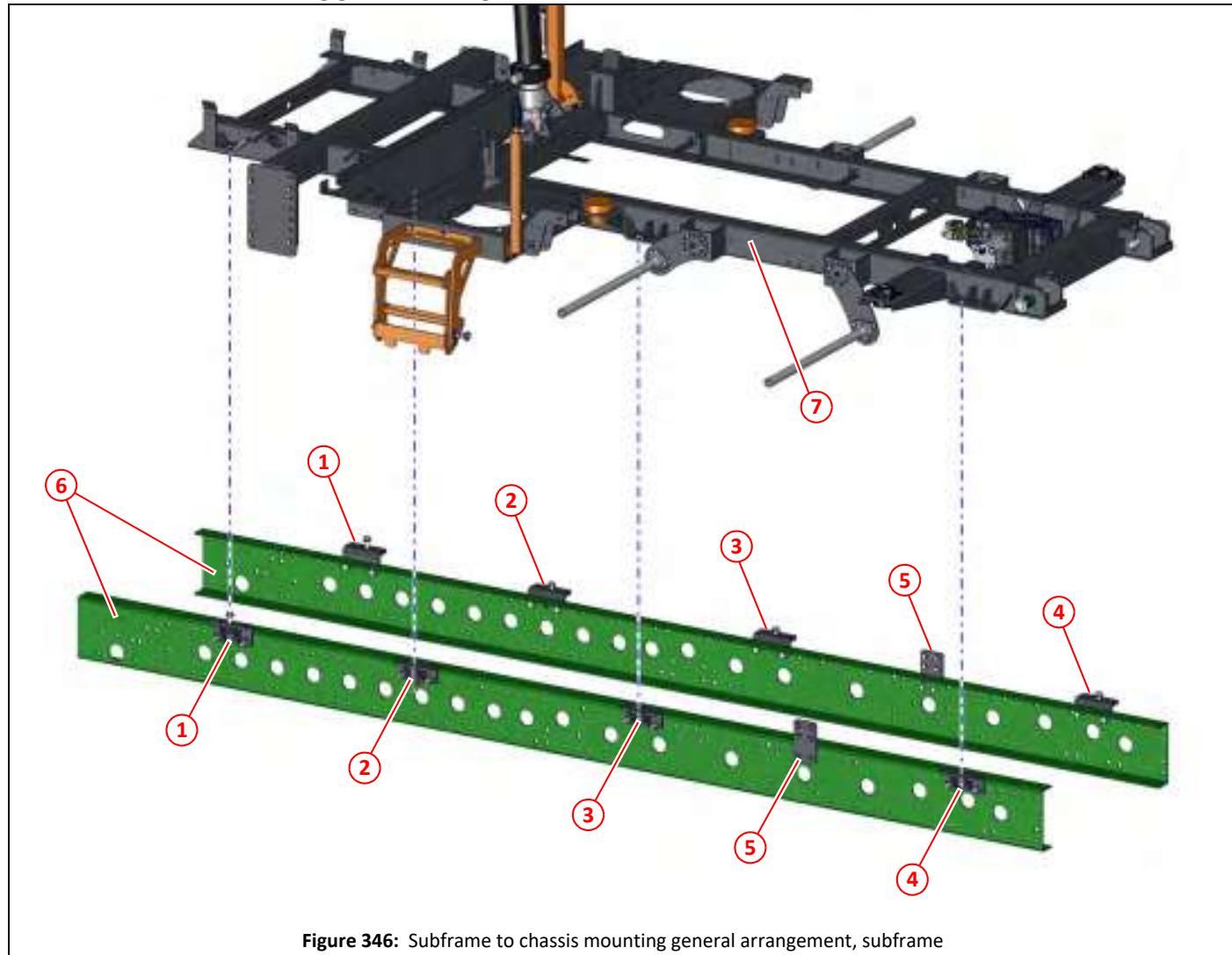
Figure 344: Engine frame and subframe general arrangement

| Item | Part No | Qty | Description                       |             |
|------|---------|-----|-----------------------------------|-------------|
| ①    |         |     | Chassis, shown for reference only |             |
| ②    | 046932  | 1   | Engine frame, front subframe      | 379         |
| ③    | 042942  | 1   | Subframe                          | 395         |
| ④    | 024249  | 1   | Ram, dual acting, hopper lift     | 167,286,389 |
| ⑤    | 047365  | 1   | Hopper safety prop assembly       | 334         |
| ⑥    | 047083  | 1   | Folding ladder assembly           | 387,388     |

**Engine frame to subframe mounting**


| Item | Part No | Qty | Description                       |     |
|------|---------|-----|-----------------------------------|-----|
| ①    |         |     | Chassis, shown for reference only |     |
| ②    | 046932  | 1   | Engine frame, front subframe      |     |
| ③    | 042942  | 1   | Subframe                          | 395 |
| ④    | 011064  | 2   | Bolt HT M12 x 110                 |     |
| ⑤    | 011096  | 4   | Washer M12                        |     |
| ⑥    | 011077  | 2   | Nyloc nut T M12                   |     |
| ⑦    | 000204  | 4   | Set bolt M14 x 60, grade 10.9     |     |
| ⑧    | 000073  | 8   | Washer M14                        |     |
| ⑨    | 000164  | 4   | Nyloc nut M14, grade 10           |     |

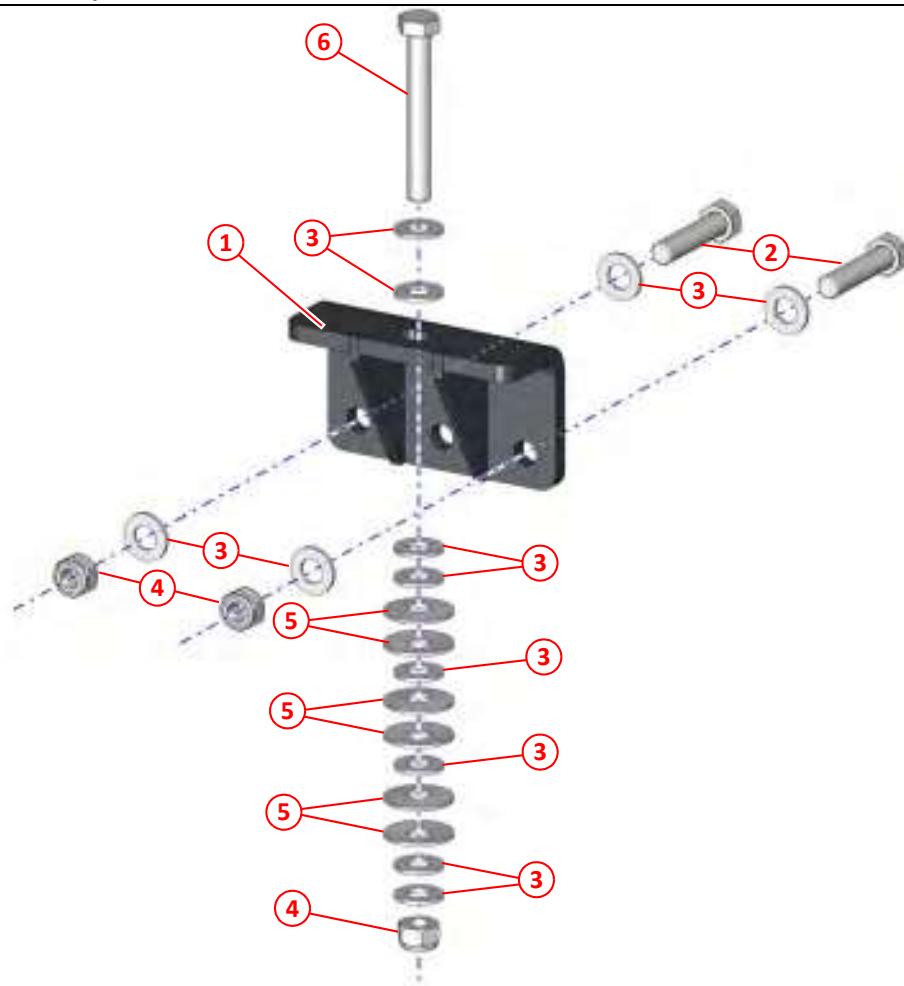
## Subframe to chassis mounting general arrangement



| Item | Part No | Qty | Description                          |     |
|------|---------|-----|--------------------------------------|-----|
| ①    |         |     | Chassis mounting bracket, position 1 | 383 |
| ②    |         |     | Chassis mounting bracket, position 2 | 384 |
| ③    |         |     | Chassis mounting bracket, position 3 | 385 |
| ④    |         |     | Chassis mounting bracket, position 4 | 385 |
| ⑤    |         |     | Chassis lateral support bracket      | 386 |
| ⑥    |         |     | Chassis rails                        |     |
| ⑦    |         |     | Subframe                             | 395 |

**i** Universal chassis mounting bracket shown and fittings shown, actual bracket and fittings will depend on the vehicle chassis.

Brackets and fittings are available for specific vehicle chassis. Please contact the Scarab Parts Department with your vehicle details and works number.

**Subframe to chassis mount, position 1**

**Figure 347:** Subframe to chassis mount, position 1

| Item | Part No | Qty | Description                     |     |
|------|---------|-----|---------------------------------|-----|
| ①    | 034907  | 1   | Chassis mounting bracket, front | 382 |
| ②    | 000204  | 2   | Set bolt M14 x 60, grade 10.9   |     |
| ③    | 000073  | 12  | Washer M14                      |     |
| ④    | 000164  | 3   | Nyloc nut T M14, grade 10       |     |
| ⑤    | 036824  | 6   | Disc spring                     |     |
| ⑥    | 000102  | 1   | Bolt HT M14 x 100, grade 10.9   |     |

**i** Universal chassis mounting bracket shown and fittings shown, actual bracket and fittings will depend on the vehicle chassis.

Brackets and fittings are available for specific vehicle chassis. Please contact the Scarab Parts Department with your vehicle details and works number.

## Subframe to chassis mount, position 2

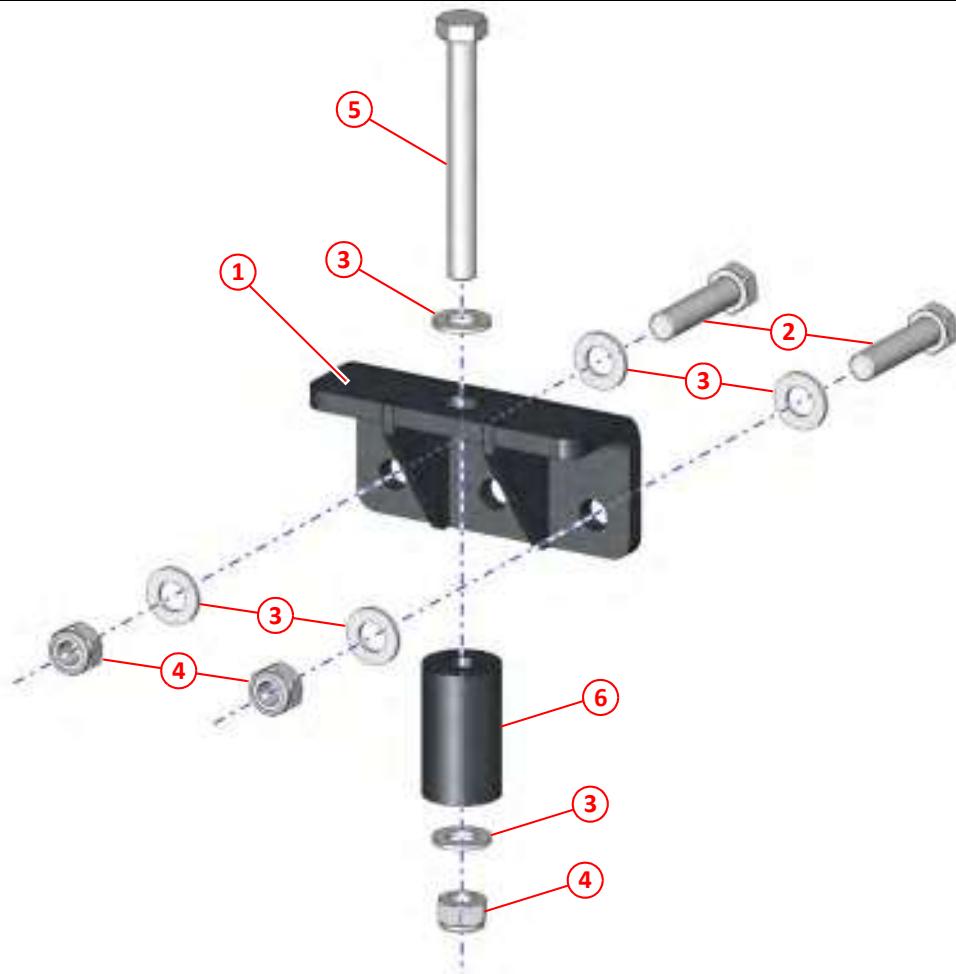
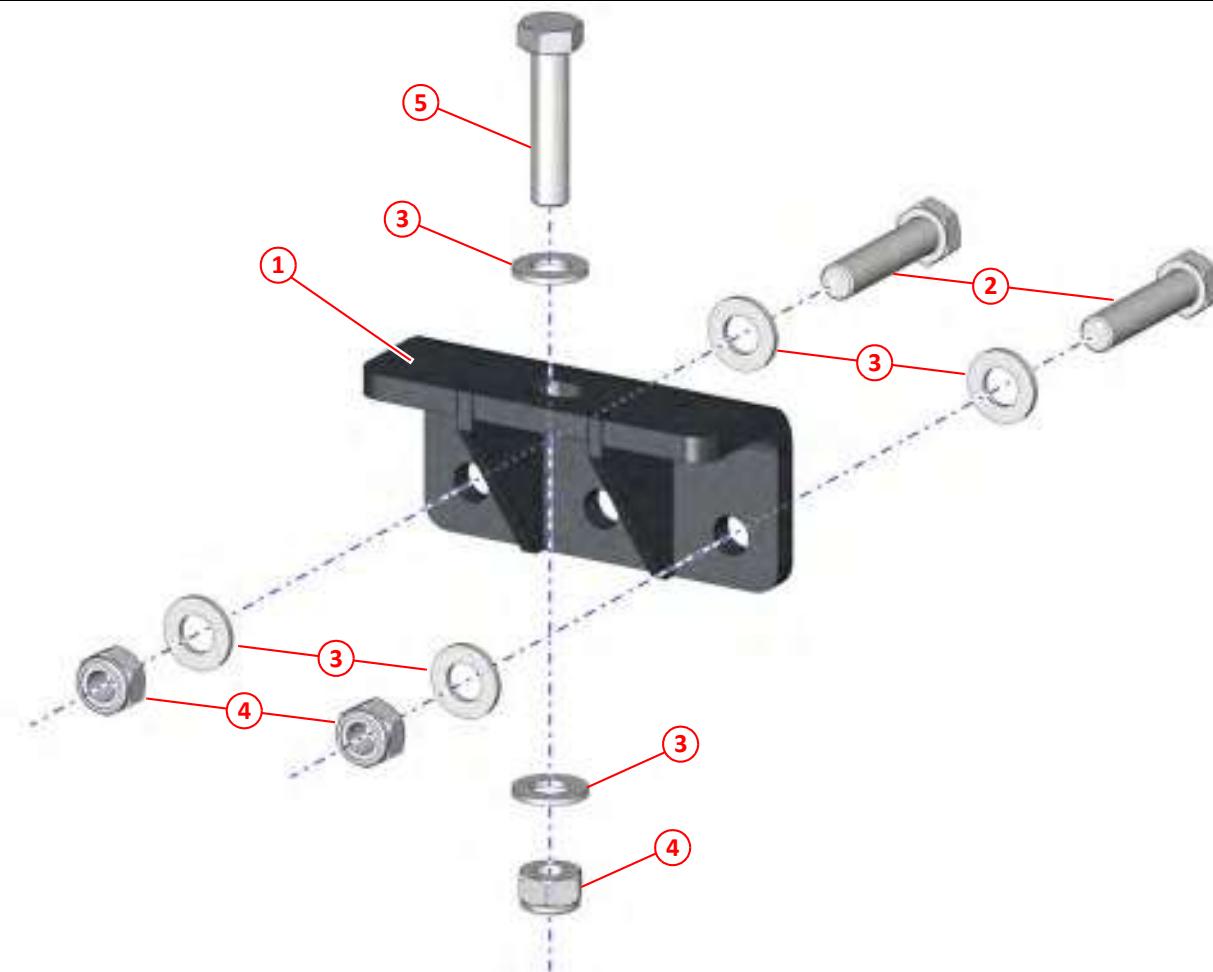


Figure 348: Subframe to chassis mount, position 2

| Item | Part No | Qty | Description                   |
|------|---------|-----|-------------------------------|
| ①    | 034384  | 1   | Chassis mounting bracket      |
| ②    | 000204  | 2   | Set bolt M14 x 60, grade 10.9 |
| ③    | 000073  | 6   | Washer M14                    |
| ④    | 000164  | 3   | Nyloc nut T M14, grade 10     |
| ⑤    | 000163  | 1   | Bolt HT M14 x 120, grade 10.9 |
| ⑥    | 034909  | 1   | Spacer ø15 x ø38 x 65         |

**i** Universal chassis mounting bracket shown and fittings shown, actual bracket and fittings will depend on the vehicle chassis.

Brackets and fittings are available for specific vehicle chassis. Please contact the Scarab Parts Department with your vehicle details and works number.

**Subframe to chassis mount, position 3 and 4**

**Figure 349:** Subframe to chassis mount, position 3 and 4

| Item | Part No | Qty | Description                   | File |
|------|---------|-----|-------------------------------|------|
| ①    | 034384  | 1   | Chassis mounting bracket      |      |
| ②    | 000204  | 2   | Set bolt M14 x 60, grade 10.9 |      |
| ③    | 000073  | 6   | Washer M14                    |      |
| ④    | 000164  | 3   | Nyloc nut T M14, grade 10     |      |
| ⑤    | 000163  | 1   | Bolt HT M14 x 120, grade 10.9 |      |

**i** Universal chassis mounting bracket shown and fittings shown, actual bracket and fittings will depend on the vehicle chassis.

Brackets and fittings are available for specific vehicle chassis. Please contact the Scarab Parts Department with your vehicle details and works number.

## Subframe to chassis lateral support

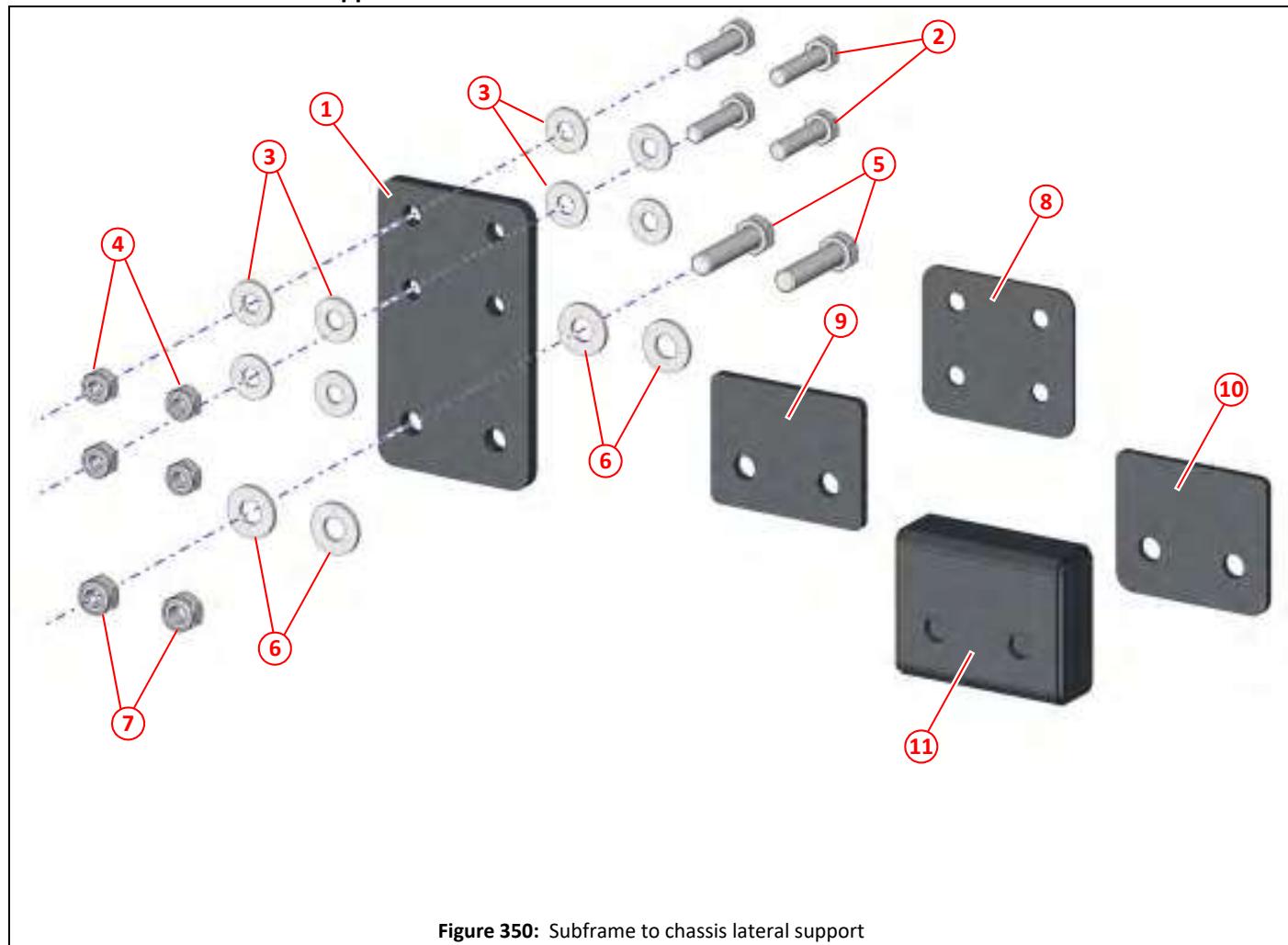
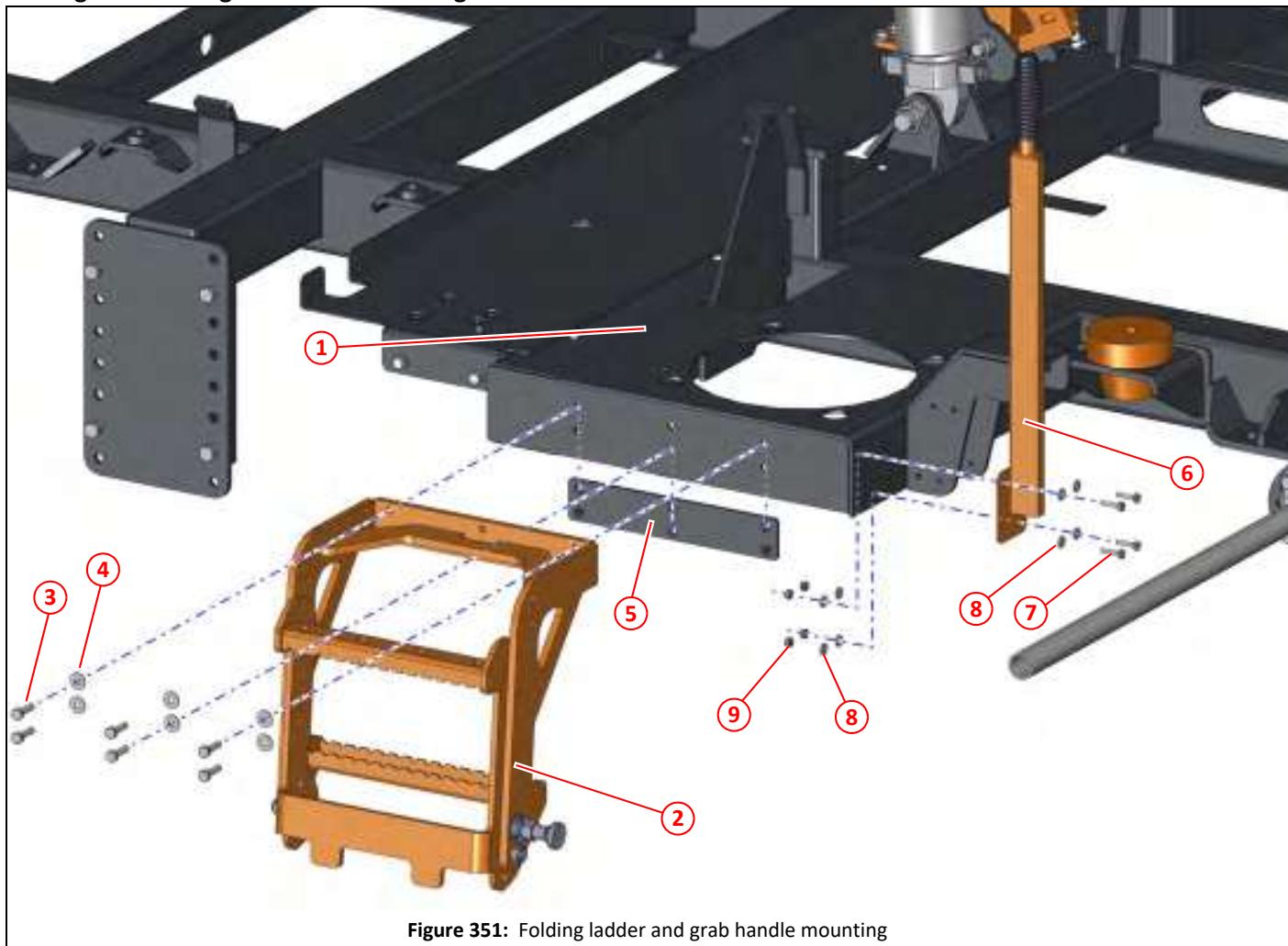


Figure 350: Subframe to chassis lateral support

| Item           | Part No | Qty | Description                     |
|----------------|---------|-----|---------------------------------|
| ①              | 040356  | 1   | Lateral support bracket, rear   |
| ②              | 011034  | 4   | Setscrew M10 x 40               |
| ③              | 011094  | 8   | Washer M10                      |
| ④              | 011075  | 4   | Nyloc nut T M10                 |
| ⑤              | 000024  | 2   | Setscrew HT M12 x 50            |
| ⑥              | 011096  | 4   | Washer M12                      |
| ⑦              | 011077  | 2   | Nyloc Nut T M12                 |
| <b>Packers</b> |         |     |                                 |
| ⑧              | 041309  | 1   | Subframe lateral support packer |
| ⑨              | 034387  | 1   | Packer Type B                   |
| ⑩              | 045200  | 1   | Lateral support packer          |
| ⑪              | 038140  | 1   | Subframe packer lateral         |

**i** Universal chassis mounting bracket shown and fittings shown, actual bracket and fittings will depend on the vehicle chassis.

Brackets and fittings are available for specific vehicle chassis. Please contact the Scarab Parts Department with your vehicle details and works number.

**Folding ladder and grab handle mounting**


| Item | Part No | Qty | Description             |     |
|------|---------|-----|-------------------------|-----|
| ①    | 042942  | 1   | Subframe                | 395 |
| ②    | 047083  | 1   | Folding ladder assembly | 388 |
| ③    | 011012  | 6   | Setscrew HT M8 x 30     |     |
| ④    | 011092  | 6   | Washer M8               |     |
| ⑤    | 047086  | 1   | Ladder mount stiffener  |     |
| ⑥    | 043608  | 1   | Grab handle             | 388 |
| ⑦    | 011087  | 4   | Setscrew M6 x 25        |     |
| ⑧    | 011090  | 8   | Washer M6               |     |
| ⑨    | 011071  | 4   | Nyloc nut T M6          |     |

## Folding ladder and grab handle

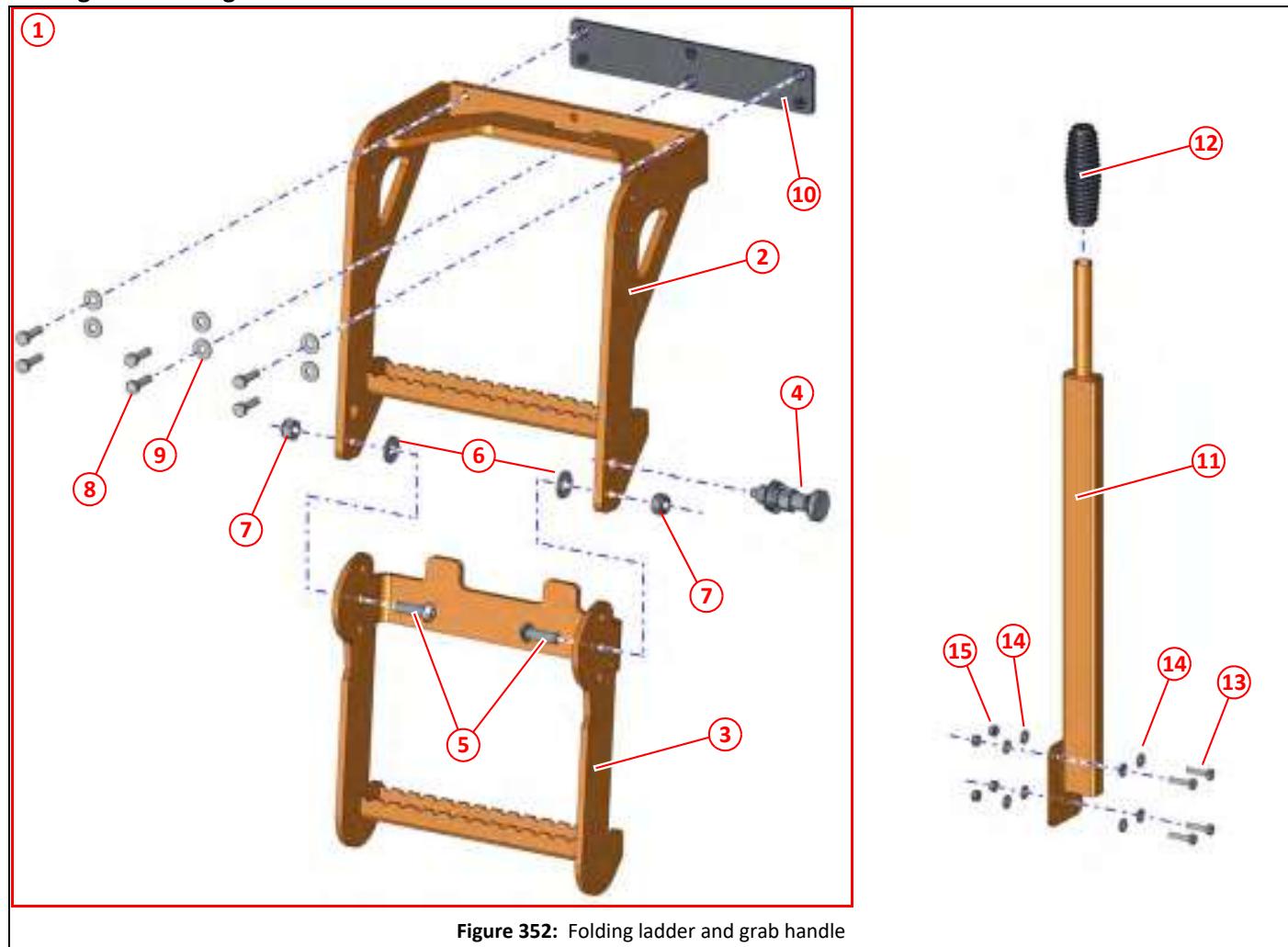
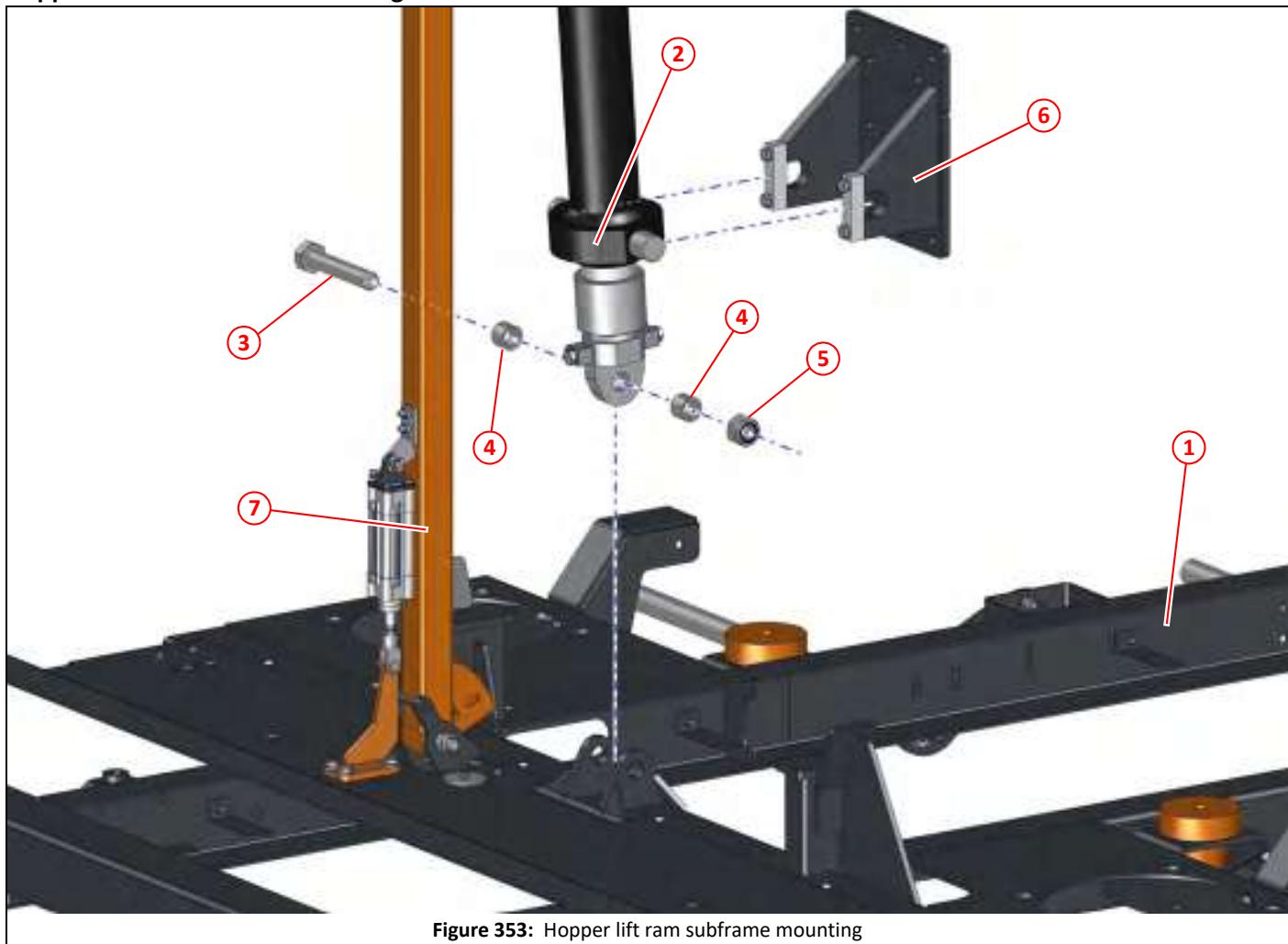


Figure 352: Folding ladder and grab handle

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 047083  | 1   | Folding ladder assembly                            |
| ②    | 048166  | 1   | Folding ladder, upper                              |
| ③    | 048167  | 1   | Folding ladder, lower                              |
| ④    | 048168  | 1   | Spring loaded plunger ø10 pin, stainless steel     |
| ⑤    | 000445  | 2   | Socket button head screw M12 x 35, stainless steel |
| ⑥    | 000277  | 2   | Washer M12, stainless steel                        |
| ⑦    | 000275  | 2   | Nyloc nut T M12, stainless steel                   |
| ⑧    | 011012  | 6   | Setscrew HT M8 x 30                                |
| ⑨    | 011092  | 6   | Washer M8  |
| ⑩    | 047086  | 1   | Ladder mount stiffener                             |
| ⑪    | 043608  | 1   | Grab handle  |
| ⑫    | 039680  | 1   | Handle grip  |
| ⑬    | 011087  | 4   | Setscrew M6 x 25                                   |
| ⑭    | 011090  | 8   | Washer M6  |
| ⑮    | 011071  | 4   | Nyloc nut T M6                                     |

**Hopper lift ram subframe mounting**

**Figure 353: Hopper lift ram subframe mounting**

| Item | Part No | Qty | Description                   |             |
|------|---------|-----|-------------------------------|-------------|
| ①    | 042942  | 1   | Subframe                      | 395         |
| ②    | 024249  | 1   | Ram, dual acting, hopper lift | 167,286,380 |
| ③    | 000241  | 1   | Bolt HT M24 x 130             |             |
| ④    | 013714  | 2   | Spacer, ram                   |             |
| ⑤    | 000008  | 1   | Nyloc nut T M24               |             |
| ⑥    | 010719  | 1   | Pivot, hopper lift ram        | 167         |
| ⑦    | 047365  | 1   | Hopper safety prop assembly   | 334         |

## Hopper safety prop subframe mounting

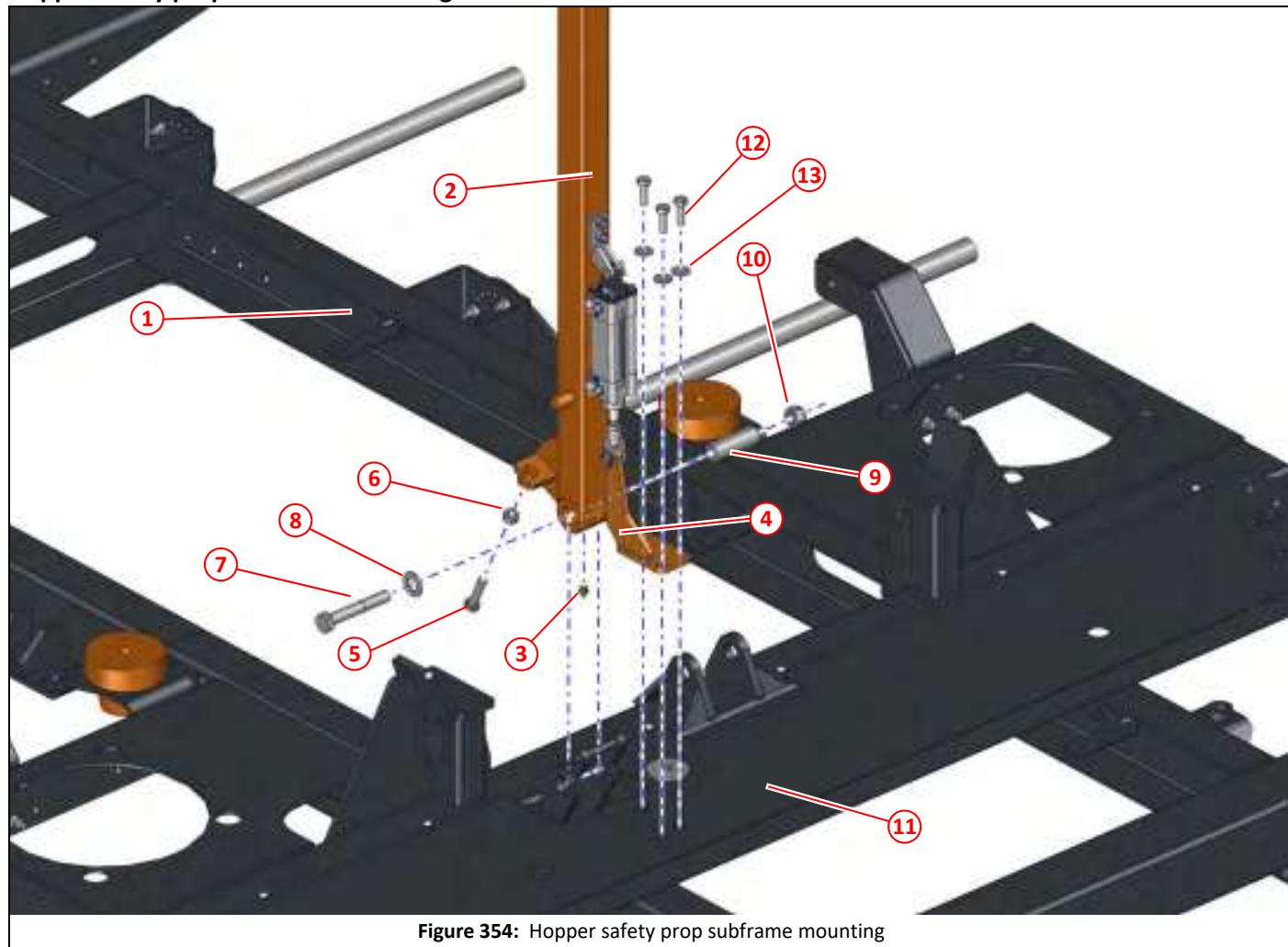
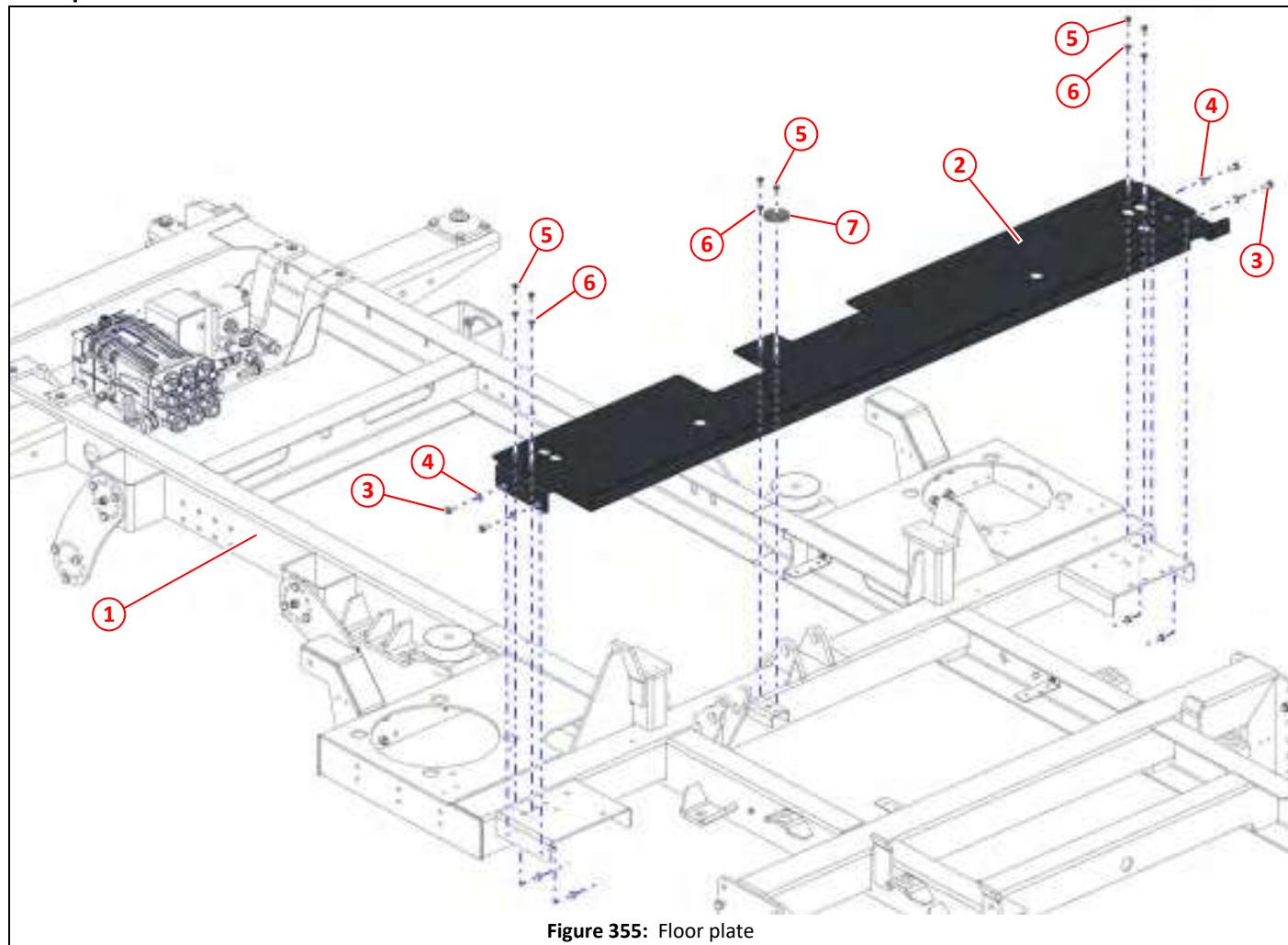


Figure 354: Hopper safety prop subframe mounting

| Item | Part No | Qty | Description                                  |     |
|------|---------|-----|--|-----|
| ①    | 042942  | 1   | Subframe                                     | 395 |
| ②    | 043391  | 1   | Hopper safety prop                           | 334 |
| ③    | 010903  | 1   | Grease nipple, straight, $\frac{1}{8}$ " BSP |     |
| ④    | 047357  | 1   | Prop kicker floor mount                      | 334 |
| ⑤    | 011054  | 1   | Setscrew HT M12 x 45                         |     |
| ⑥    | 011076  | 1   | Full nut M12                                 |     |
| ⑦    | 011133  | 1   | Bolt HT M16 x 100                            |     |
| ⑧    | 011135  | 1   | Washer M16                                   |     |
| ⑨    | 036240  | 1   | Hopper prop spacer                           |     |
| ⑩    | 011060  | 1   | Nyloc nut T M16                              |     |
| ⑪    | 047237  | 1   | Floor plate                                  | 391 |
| ⑫    | 011032  | 3   | Setscrew HT M10 x 30                         |     |
| ⑬    | 011094  | 3   | Washer M10                                   |     |

**Floor plate**

**Figure 355: Floor plate**

| Item | Part No | Qty | Description                       |     |
|------|---------|-----|-----------------------------------|-----|
| ①    | 042942  | 1   | Subframe                          | 395 |
| ②    | 047237  | 1   | Floor plate                       | 390 |
| ③    | 000256  | 4   | Setscrew M8 x 20, stainless steel |     |
| ④    | 000419  | 4   | Washer M8 ø17                     |     |
| ⑤    | 000250  | 6   | Setscrew M6 x 16, stainless steel |     |
| ⑥    | 000254  | 5   | Washer M6, stainless steel        |     |
| ⑦    | 037064  | 1   | Lock washer                       |     |

## Nozzle lift cylinder mounting bracket

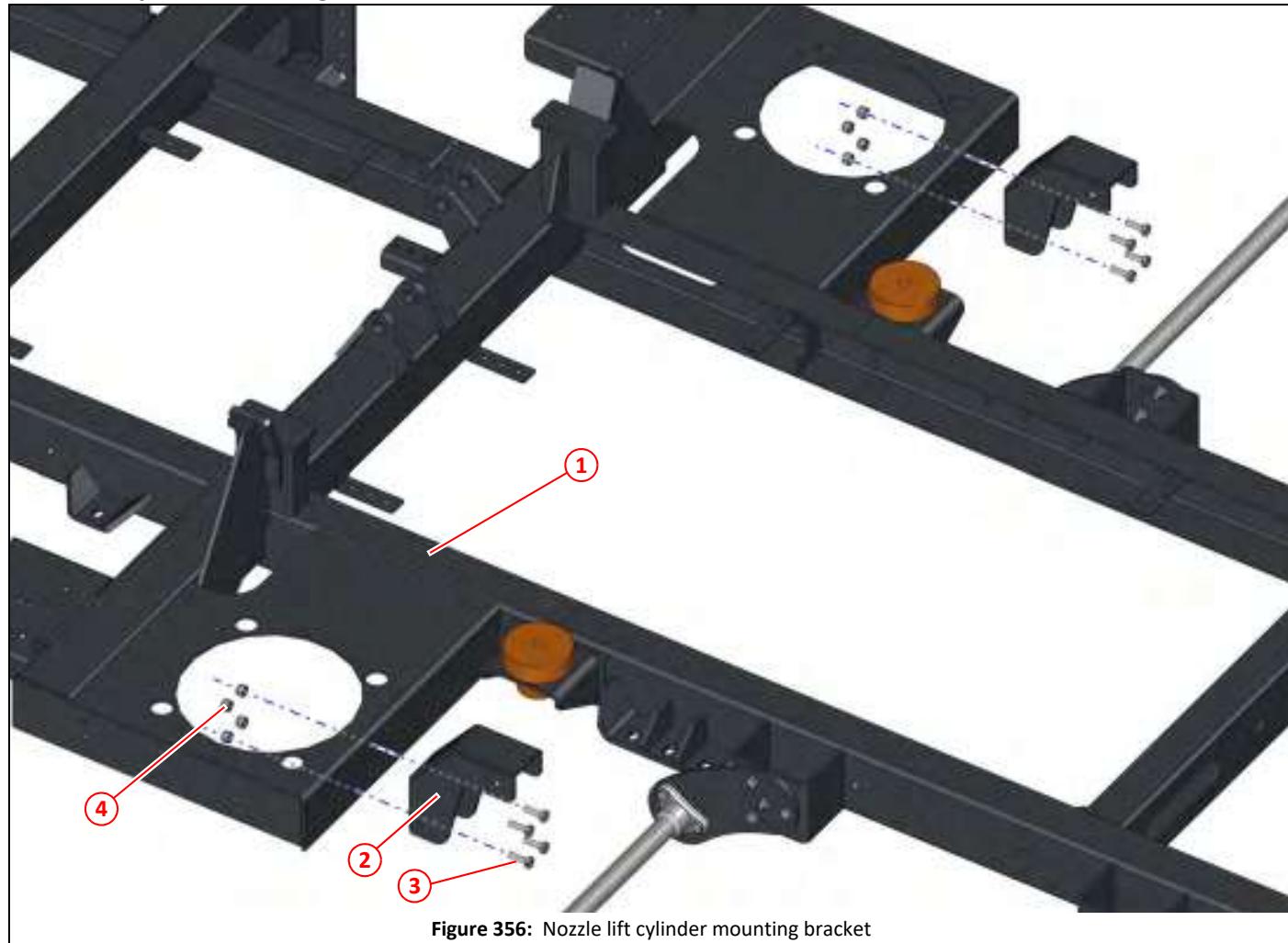
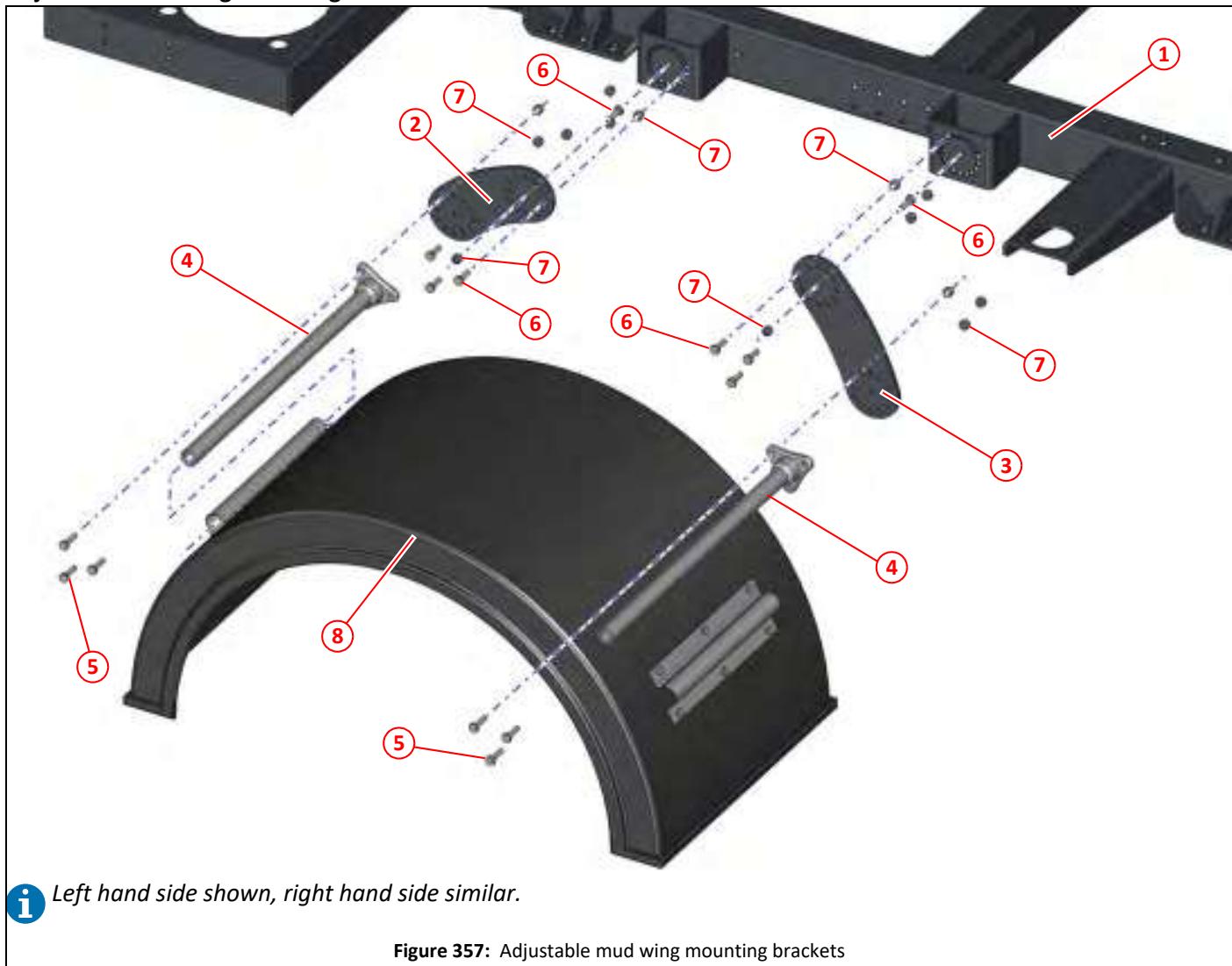


Figure 356: Nozzle lift cylinder mounting bracket

| Item | Part No | Qty | Description                            | 395 |
|------|---------|-----|--|-----|
| ①    | 042942  | 1   | Subframe                               |     |
| ②    | 030775  | 1   | Cylinder mounting bracket, nozzle lift |     |
| ③    | 011032  | 4   | Setscrew M10 x 30                      |     |
| ④    | 011075  |     | Nyloc nut T M10                        |     |

 Quantities shown are for one bracket.

**Adjustable mud wing mounting brackets**


| Item | Part No  | Qty | Description                  |     |
|------|----------|-----|------------------------------|-----|
| ①    | 042942   | 1   | Subframe                     | 395 |
| ②    | 047370 * | 1   | Mud wing offset plate, short |     |
| ③    | 047151 * | 1   | Mud wing offset plate, long  |     |
| ④    | 013403   | 2   | Stay, mud wing               |     |
| ⑤    | 011033   | 6   | Setscrew HT M10 x 35         |     |
| ⑥    | 011032   | 8   | Setscrew HT M10 x 30         |     |
| ⑦    | 011075   | 14  | Nyloc nut T M10              |     |
| ⑧    | 021945   | 1   | Mud wing / mudguard          | 394 |

\*. Which mud wing offset plates are used will depend on the vehicle chassis, both types are shown above.

## Mud wings / mudguards

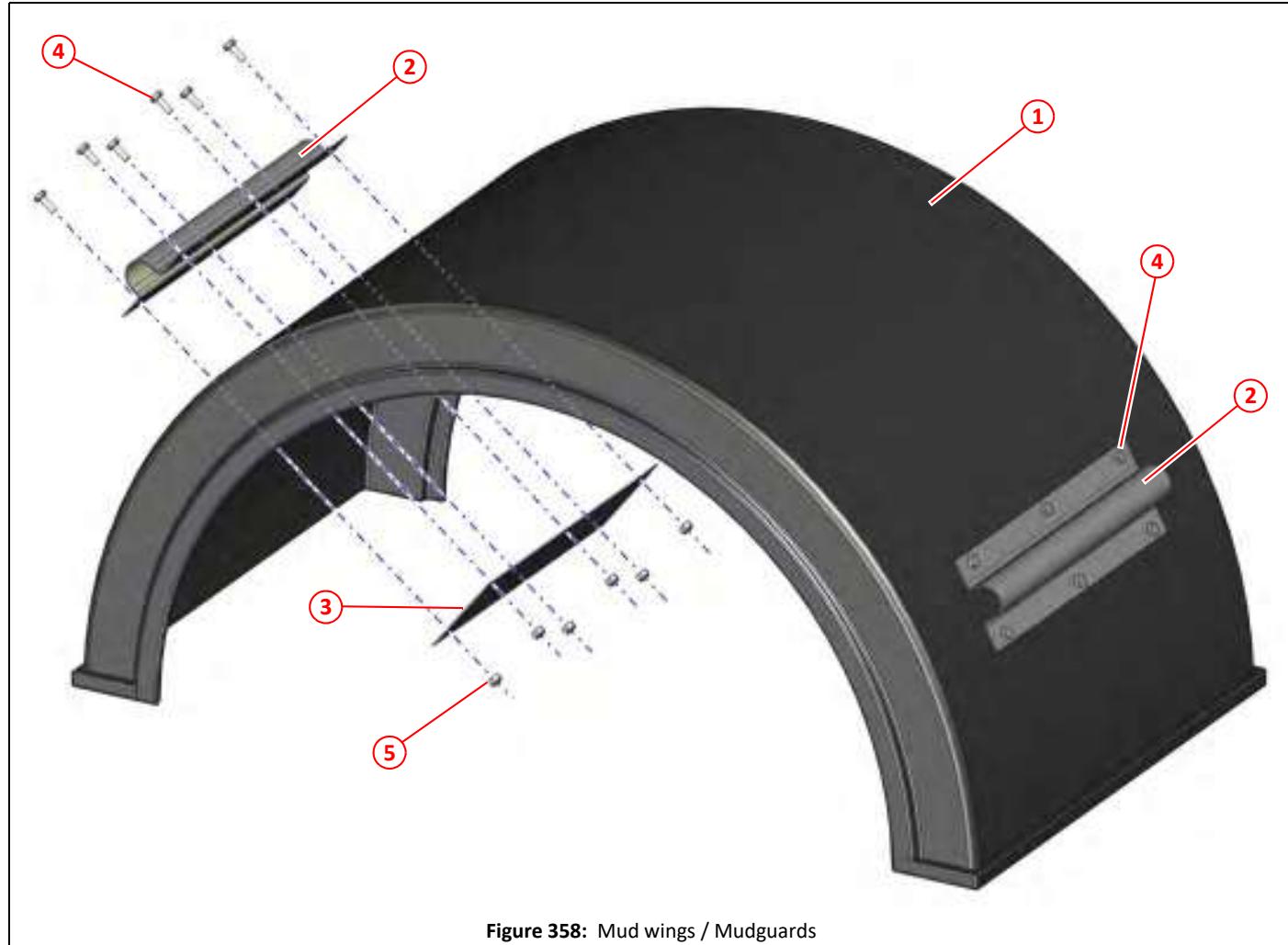
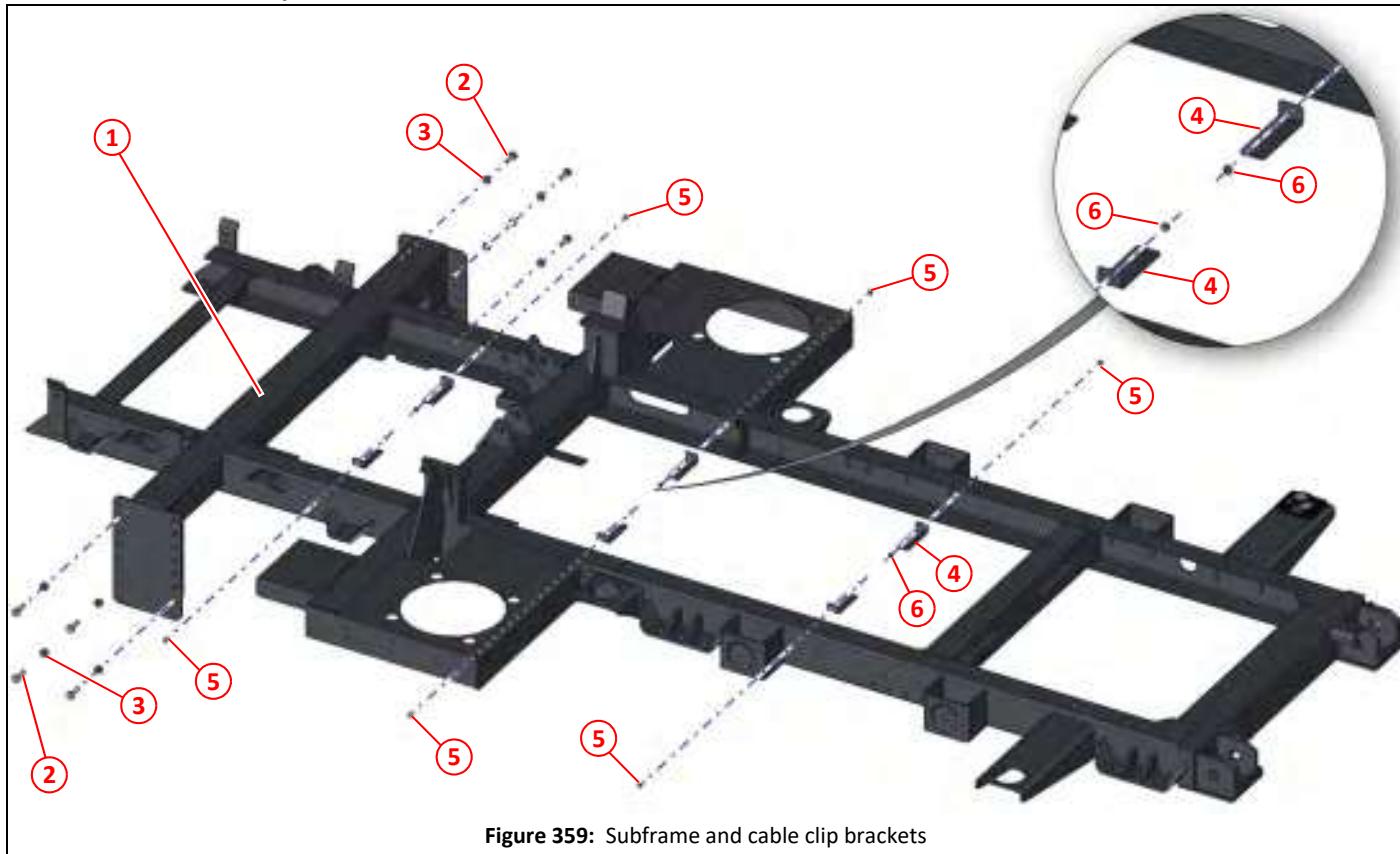


Figure 358: Mud wings / Mudguards

| Item | Part No | Qty | Description                            |     |
|------|---------|-----|--|-----|
| ①    | 021945  | 1   | Mud wing / mudguard                    | 393 |
| ②    | 013404  | 2   | Bracket, mud wing / mudguard           |     |
| ③    | 012954  | 2   | Backplate, mud wing / mudguard bracket |     |
| ④    | 011010  | 12  | Setscrew HT M8 x 20                    |     |
| ⑤    | 011073  | 12  | Nyloc nut T M8                         |     |

**Subframe and cable clip brackets**


| Item | Part No | Qty | Description                  |
|------|---------|-----|------------------------------|
| ①    | 042942  | 1   | Subframe                     |
| ②    | 011053  | 8   | Setscrew HT M12 x 35         |
| ③    | 011077  | 8   | Nyloc nut T M12              |
| ④    | 028862  | 6   | Bracket, cable clip mounting |
| ⑤    | 011001  | 6   | Setscrew HT M6 x 16          |
| ⑥    | 011071  | 6   | Nyloc nut T M6               |



# Engine

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## Engine arrangement

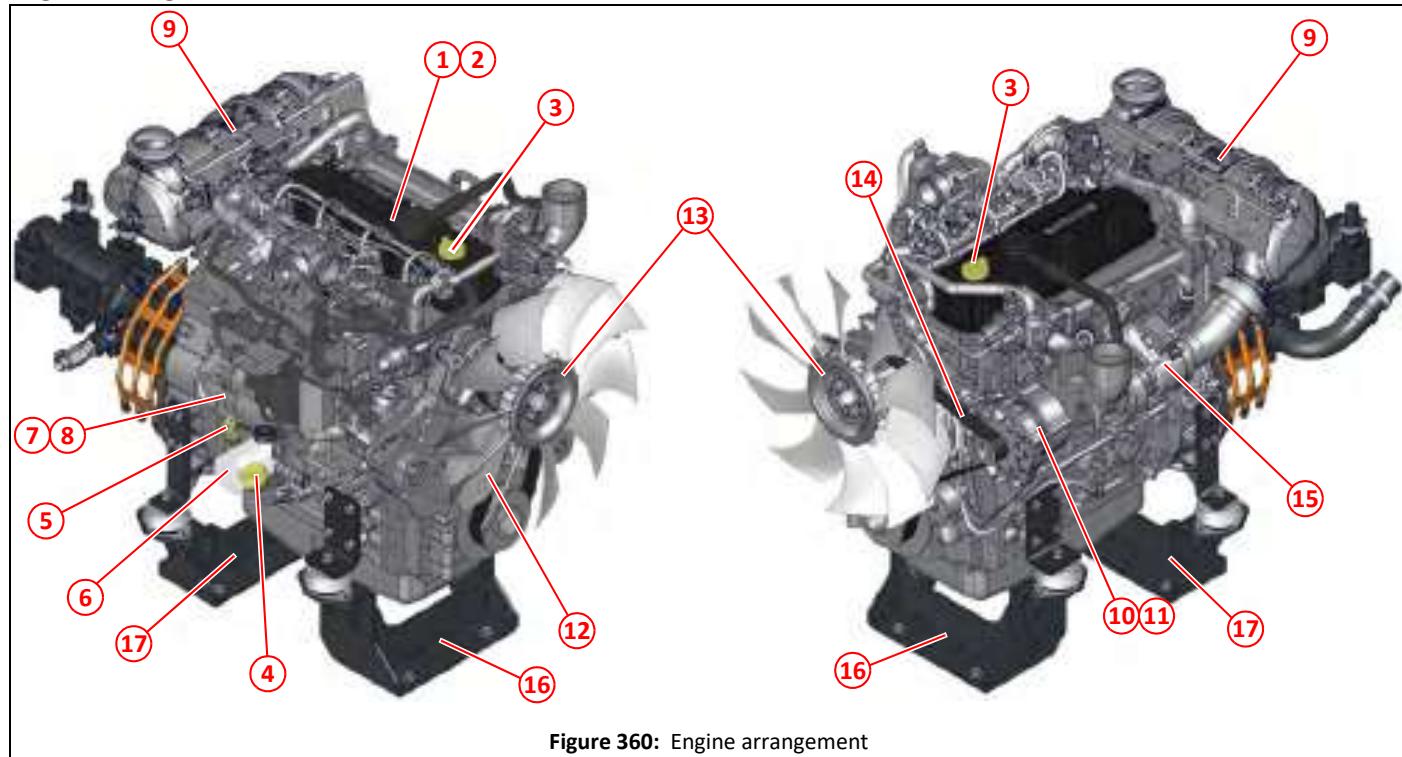
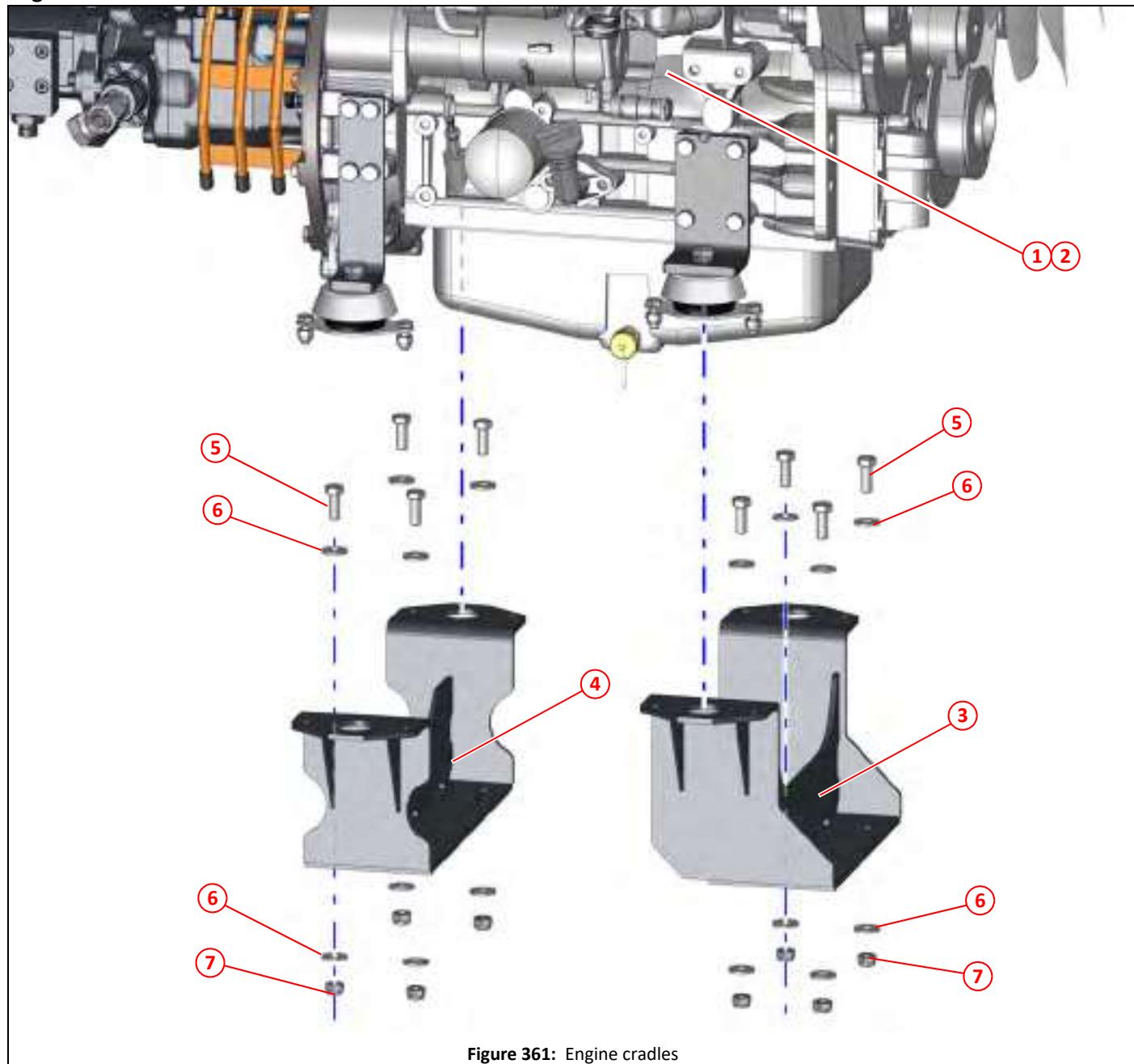


Figure 360: Engine arrangement

| Item | Part No | Qty | Description                    |
|------|---------|-----|--------------------------------|
| ①    | 047624  | 1   | DEUTZ 3.6 engine (Stage V) 12V |
| ②    | 046169  | 1   | DEUTZ 3.6 engine (Stage V) 24V |
| ③    | 043781  | 1   | Filler cap lube oil, top       |
| ④    | 043781  | 1   | Filler cap lube oil, side      |
| ⑤    | 043222  | 1   | Lube oil level dipstick        |
| ⑥    | 042232  | 1   | Lube oil filter                |
| ⑦    | 044516  | 1   | Starter motor 12V              |
| ⑧    | 043795  | 1   | Starter motor 24V              |
| ⑨    | 045980  | 1   | DEUTZ EAT                      |
| ⑩    | 044517  | 1   | Alternator 14V 95A 3.6L4 DEUTZ |
| ⑪    | 043816  | 1   | Alternator 28V 55A 3.6L4 DEUTZ |
| ⑫    | 043815  | 1   | Tensioner, V ribbed belt       |
| ⑬    | 043161  | 1   | Fan and hub kit                |
| ⑭    | 043789  | 1   | V ribbed belt 3.6L4 DEUTZ      |
| ⑮    | 047356  | 1   | DEUTZ Turbo                    |
| ⑯    | 042809  | 1   | Engine cradle, front           |
| ⑰    | 042810  | 1   | Engine cradle, rear            |

**Engine cradles**

**Figure 361:** Engine cradles

| Item | Part No | Qty | Description                    | File |
|------|---------|-----|--------------------------------|------|
| ①    | 047624  | 1   | DEUTZ 3.6 engine (Stage V) 12V |      |
| ②    | 046169  | 1   | DEUTZ 3.6 engine (Stage V) 24V |      |
| ③    | 042809  | 1   | Engine cradle, front           |      |
| ④    | 042810  | 1   | Engine cradle, rear            |      |
| ⑤    | 011052  | 8   | Setscrew M12 x 30              |      |
| ⑥    | 011096  | 16  | Washer M12                     |      |
| ⑦    | 011077  | 8   | Nyloc nut T M12                |      |

## Engine mounts

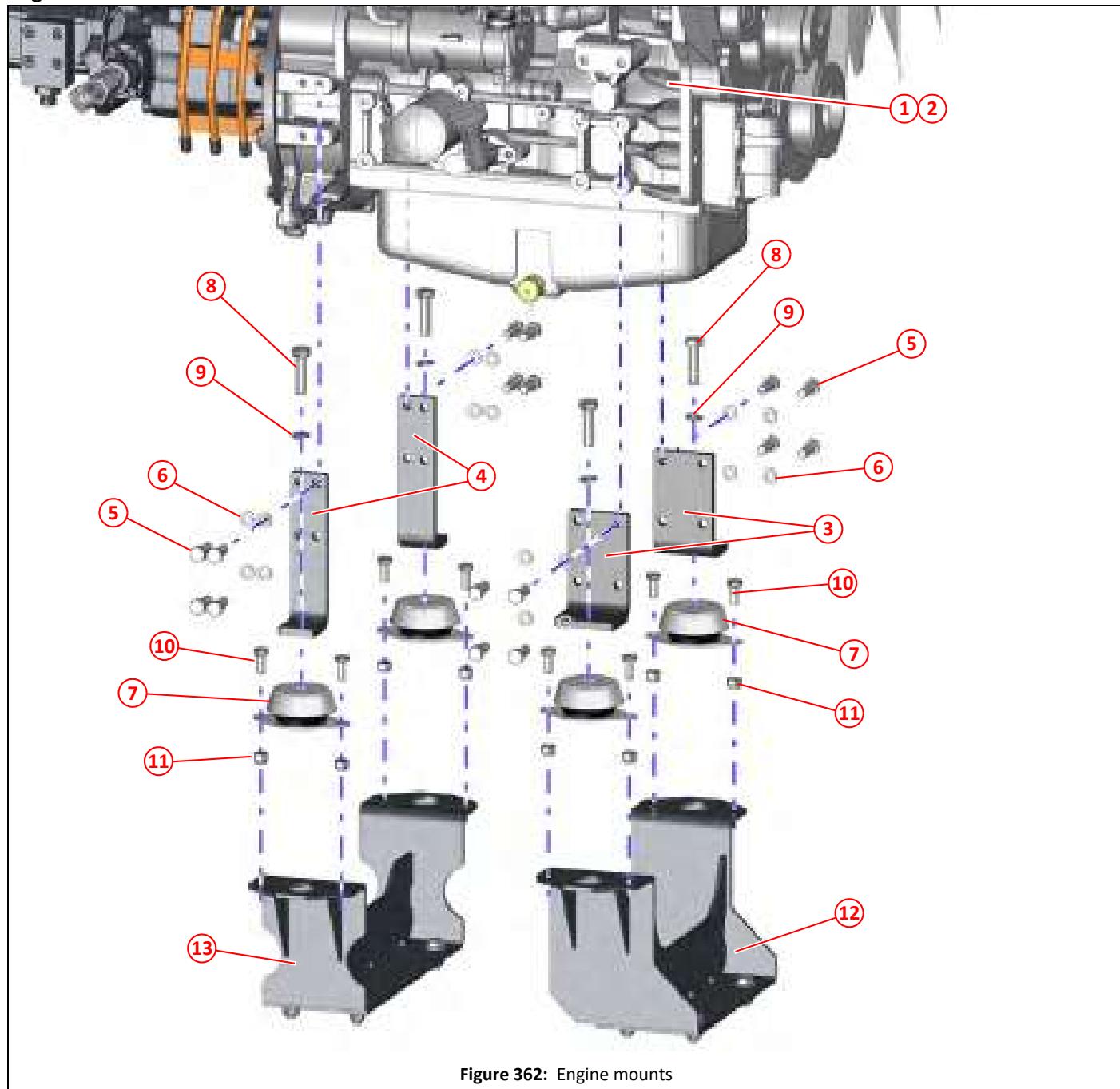
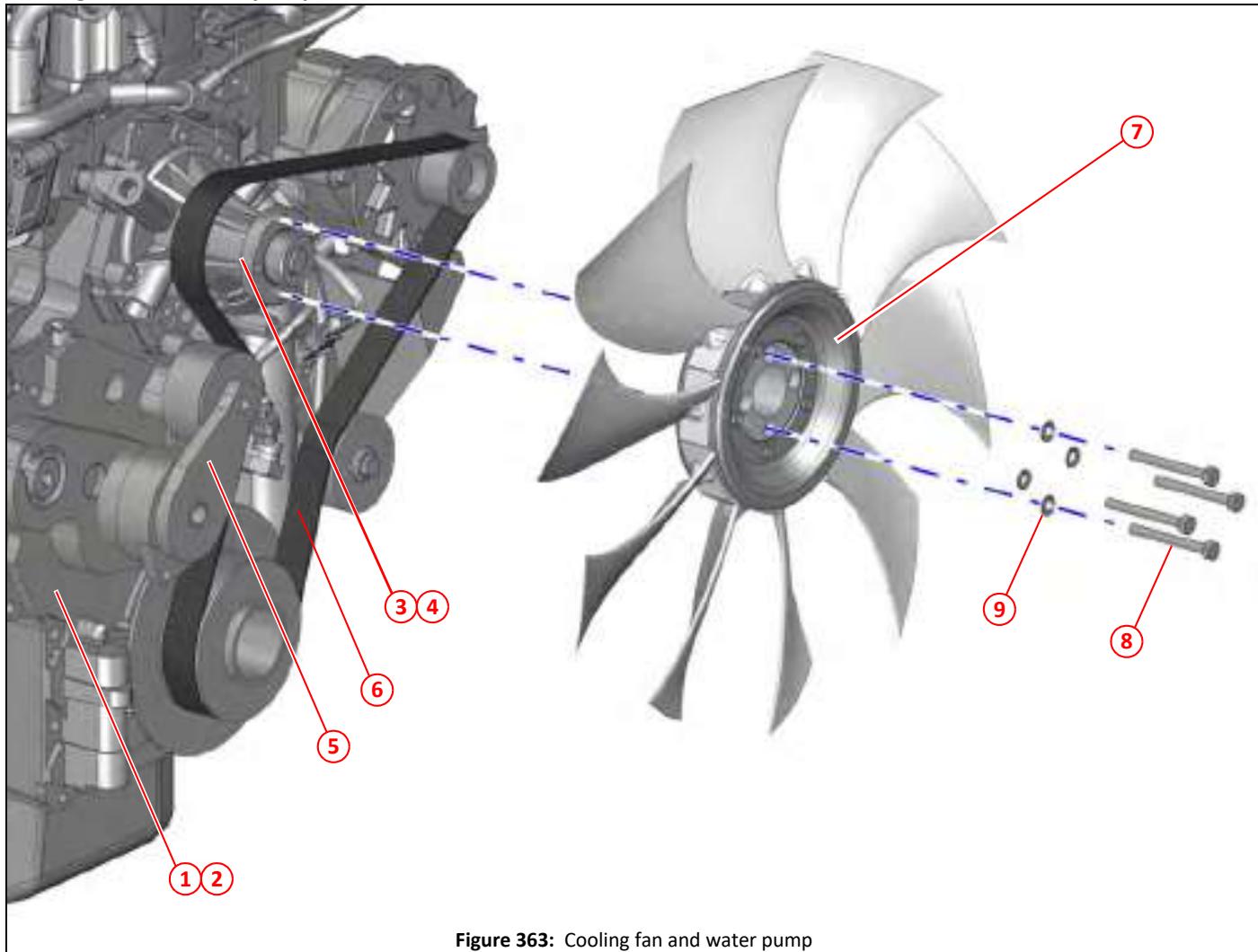


Figure 362: Engine mounts

| Item | Part No | Qty | Description                          |
|------|---------|-----|--------------------------------------|
| ①    | 047624  | 1   | DEUTZ 3.6 engine (Stage V) 12V       |
| ②    | 046169  | 1   | DEUTZ 3.6 engine (Stage V) 24V       |
| ③    | 042808  | 2   | Engine mounting, front               |
| ④    | 042811  | 2   | Engine mounting, rear                |
| ⑤    | 000552  | 16  | Setscrew HT M12 x 1.75 x 35 10.9 BZP |
| ⑥    | 011097  | 16  | Spring washer M12                    |
| ⑦    | 030724  | 4   | Engine mount                         |
| ⑧    | 000553  | 4   | Bolt M14 x 2 x 50 10.9 BZP           |
| ⑨    | 011106  | 4   | Spring washer M14                    |
| ⑩    | 011031  | 8   | Setscrew M10 x 25                    |
| ⑪    | 011075  | 8   | Nyloc nut T M10                      |
| ⑫    | 042809  | 1   | Engine cradle, front                 |
| ⑬    | 042810  | 1   | Engine cradle, rear                  |

**Cooling fan and water pump**


| Item | Part No | Qty | Description                           | File |
|------|---------|-----|---------------------------------------|------|
| ①    | 047624  | 1   | DEUTZ 3.6 engine (Stage V) 12V        |      |
| ②    | 046169  | 1   | DEUTZ 3.6 engine (Stage V) 24V        |      |
| ③    | 046851  | 1   | Water pump                            |      |
| ④    | 046690  | 1   | Pulley, water pump pulley (not shown) |      |
| ⑤    | 043815  | 1   | Tensioner, V ribbed belt              |      |
| ⑥    | 043789  | 1   | V ribbed belt 3.6L4 DEUTZ             |      |
| ⑦    | 043161  | 1   | Fan and hub kit                       |      |
| ⑧    | 011018  | 4   | Bolt M8 x 70                          |      |
| ⑨    | 011093  | 4   | Spring washer M8                      |      |

## Ancillary belt, tensioner, alternator and engine speed sensors

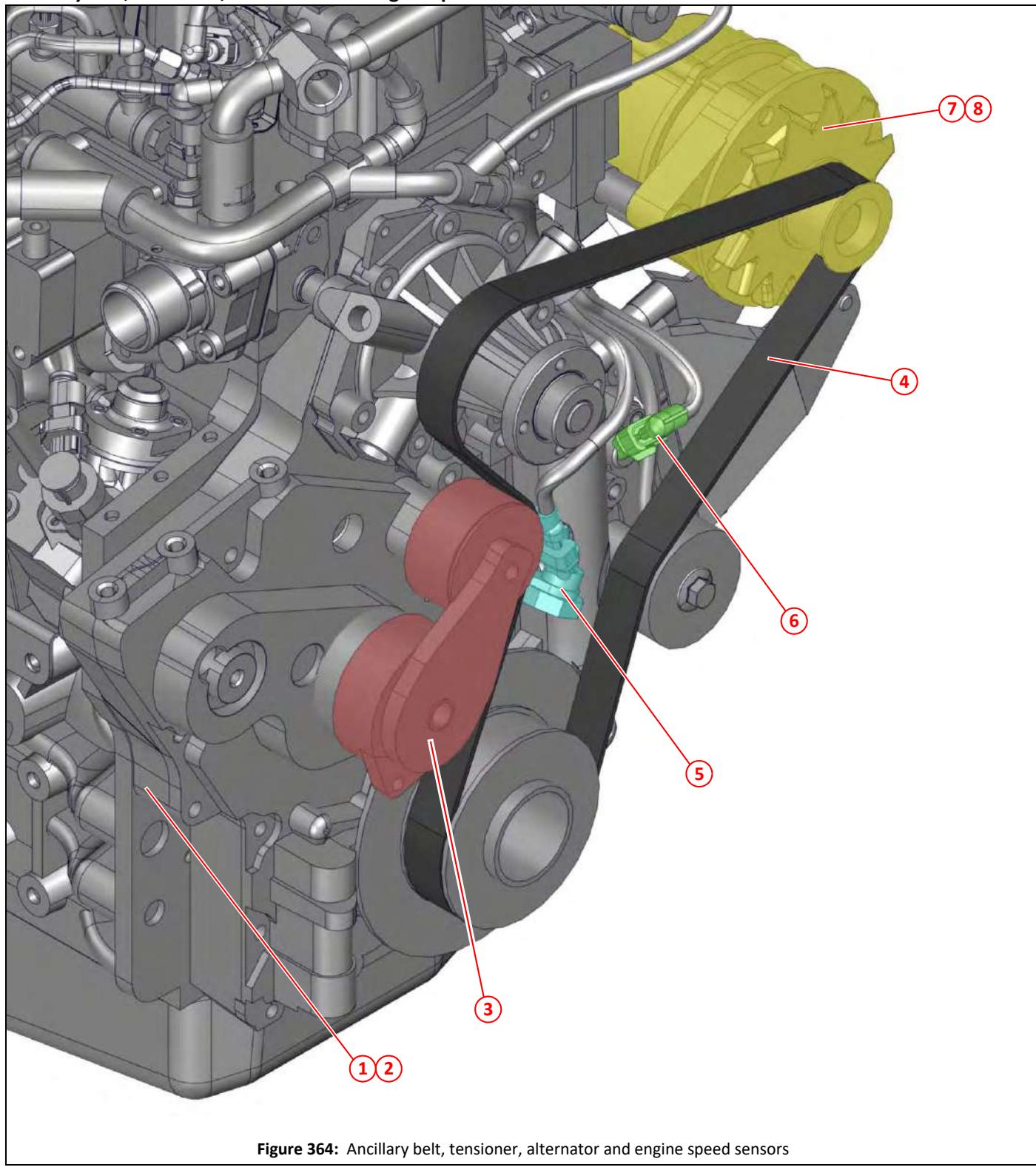
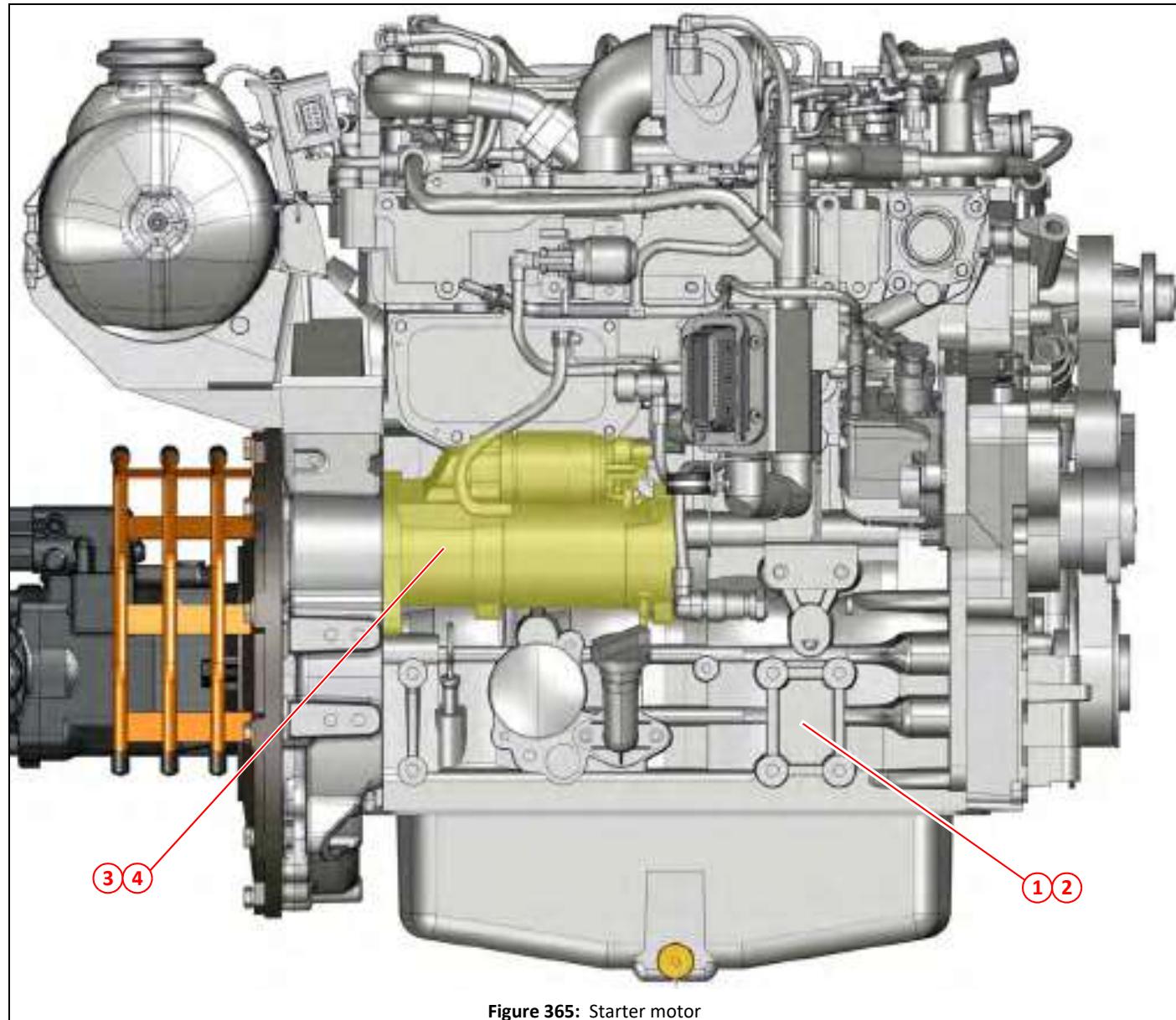


Figure 364: Ancillary belt, tensioner, alternator and engine speed sensors

| Item | Part No | Qty | Description                    |
|------|---------|-----|--------------------------------|
| ①    | 047624  | 1   | DEUTZ 3.6 engine (Stage V) 12V |
| ②    | 046169  | 1   | DEUTZ 3.6 engine (Stage V) 24V |
| ③    | 043815  | 1   | Tensioner, V ribbed belt       |
| ④    | 043789  | 1   | V ribbed belt 3.6L4 DEUTZ      |
| ⑤    | 043797  | 1   | Speed sensor, crankshaft       |
| ⑥    | 043797  | 1   | Speed sensor, camshaft         |
| ⑦    | 044517  | 1   | Alternator 14V 95A 3.6L4 DEUTZ |
| ⑧    | 043816  | 1   | Alternator 28V 55A 3.6L4 DEUTZ |

**Starter motor**


| Item | Part No | Qty | Description                    |
|------|---------|-----|--------------------------------|
| ①    | 047624  | 1   | DEUTZ 3.6 engine (Stage V) 12V |
| ②    | 046169  | 1   | DEUTZ 3.6 engine (Stage V) 24V |
| ③    | 044516  | 1   | Starter motor 12V              |
| ④    | 043795  | 1   | Starter motor 24V              |

## Rail pressure sensor, charge air pressure and temp sensor

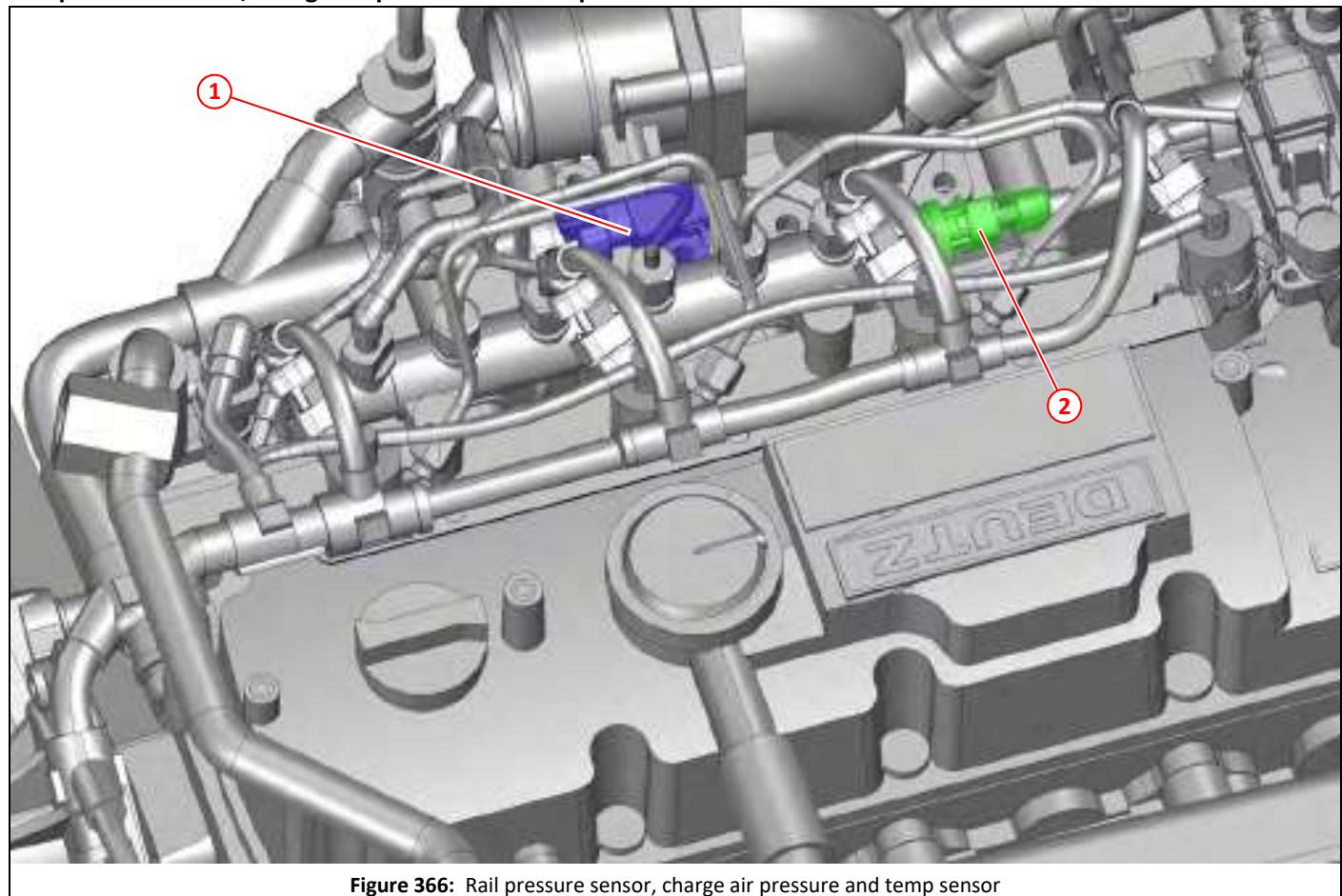


Figure 366: Rail pressure sensor, charge air pressure and temp sensor

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 043798  | 1   | Charge air pressure transmitter and charge air temperature transmitter |
| ②    | 043785  | 1   | Pressure sensor, rail  |

## Coolant temperature sensor

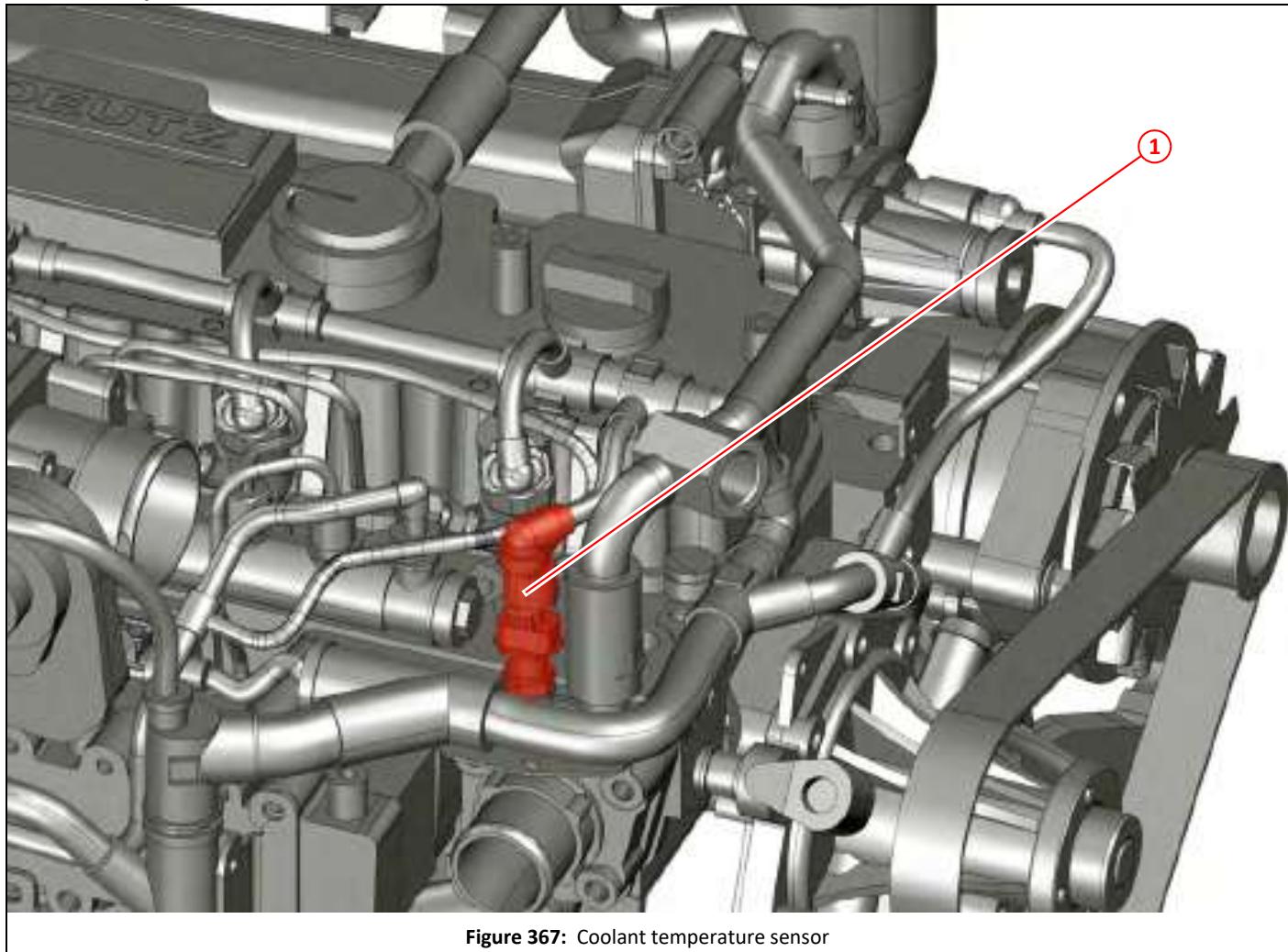
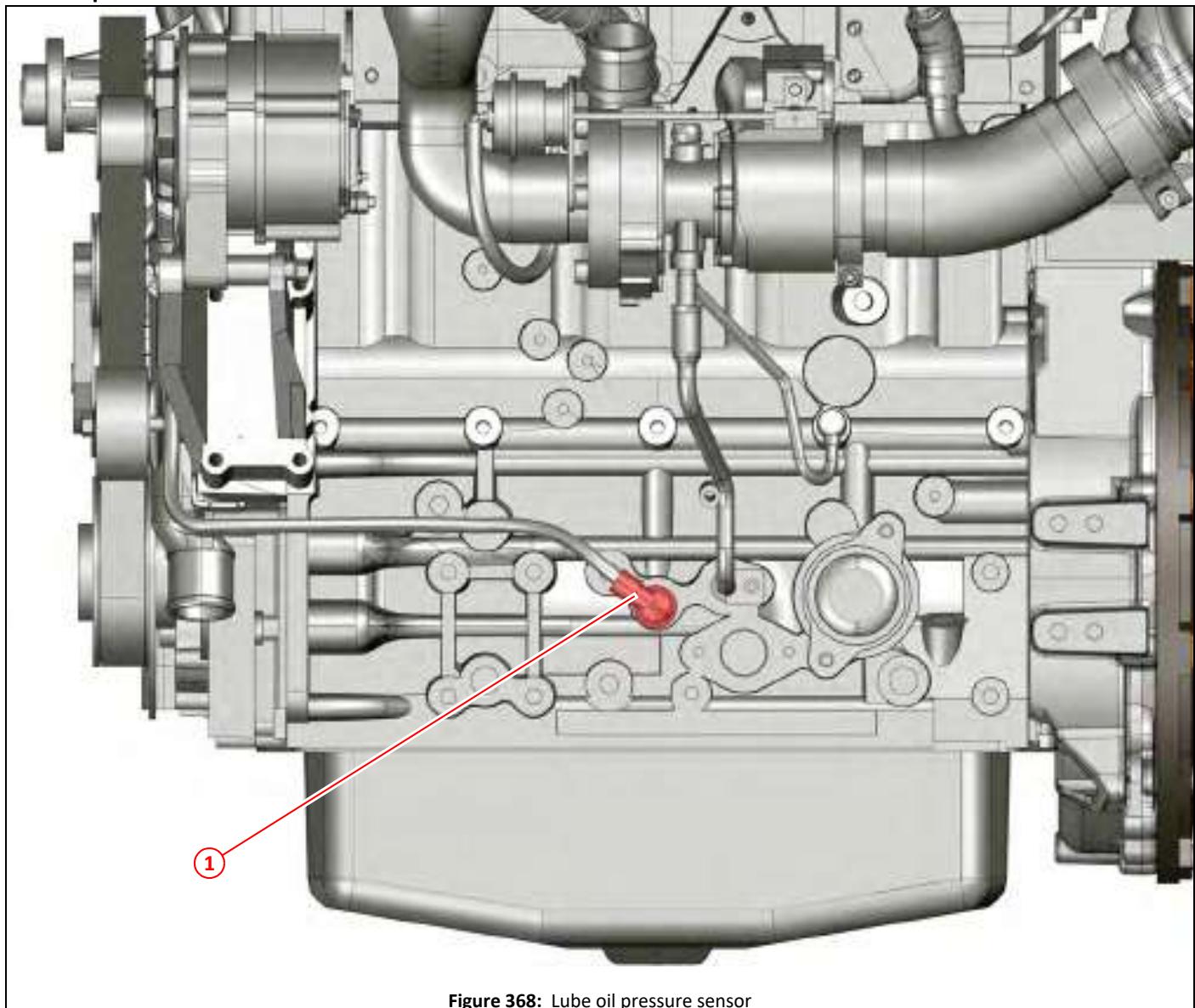


Figure 367: Coolant temperature sensor

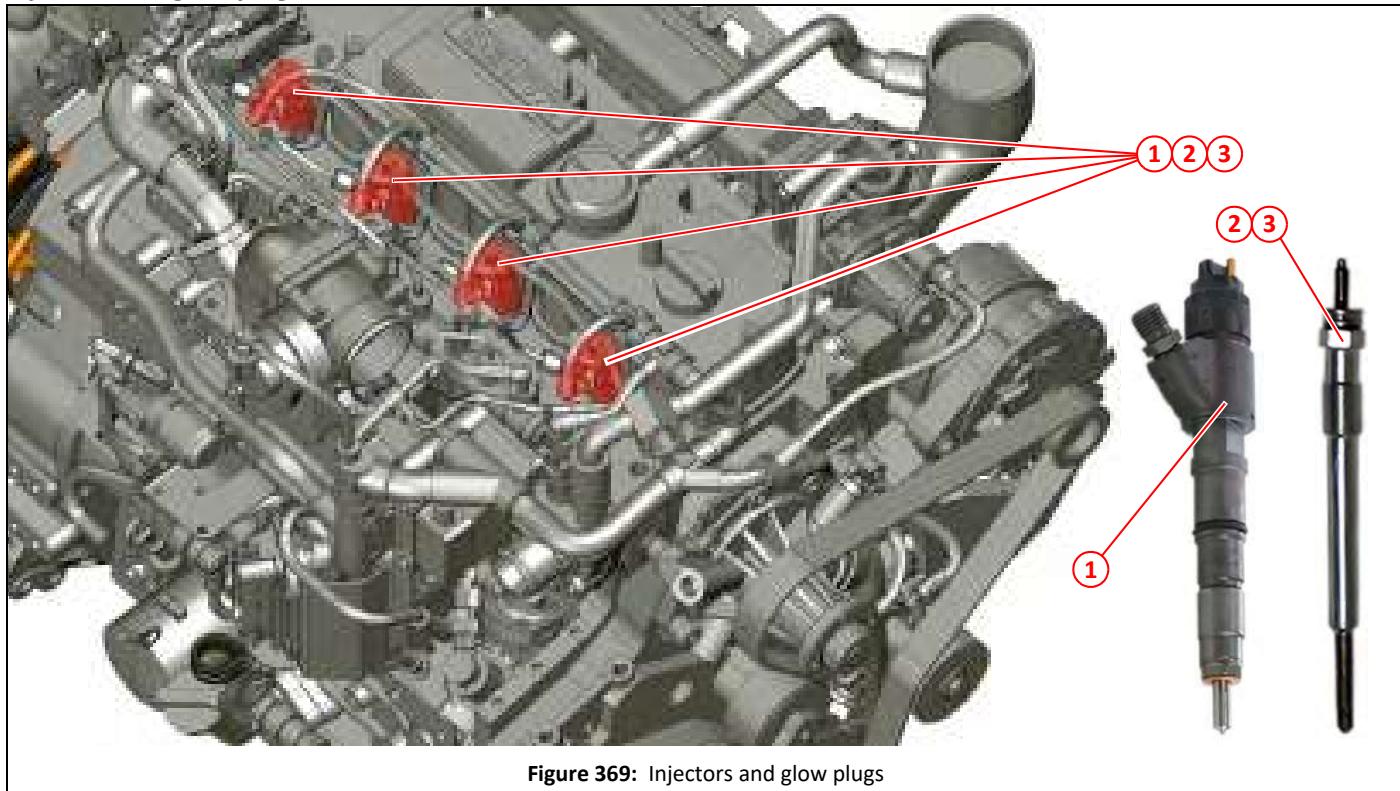
| Item | Part No | Qty | Description                |  |
|------|---------|-----|----------------------------|--|
| ①    | 043814  | 1   | Coolant temperature sender |  |

## Lube oil pressure sensor



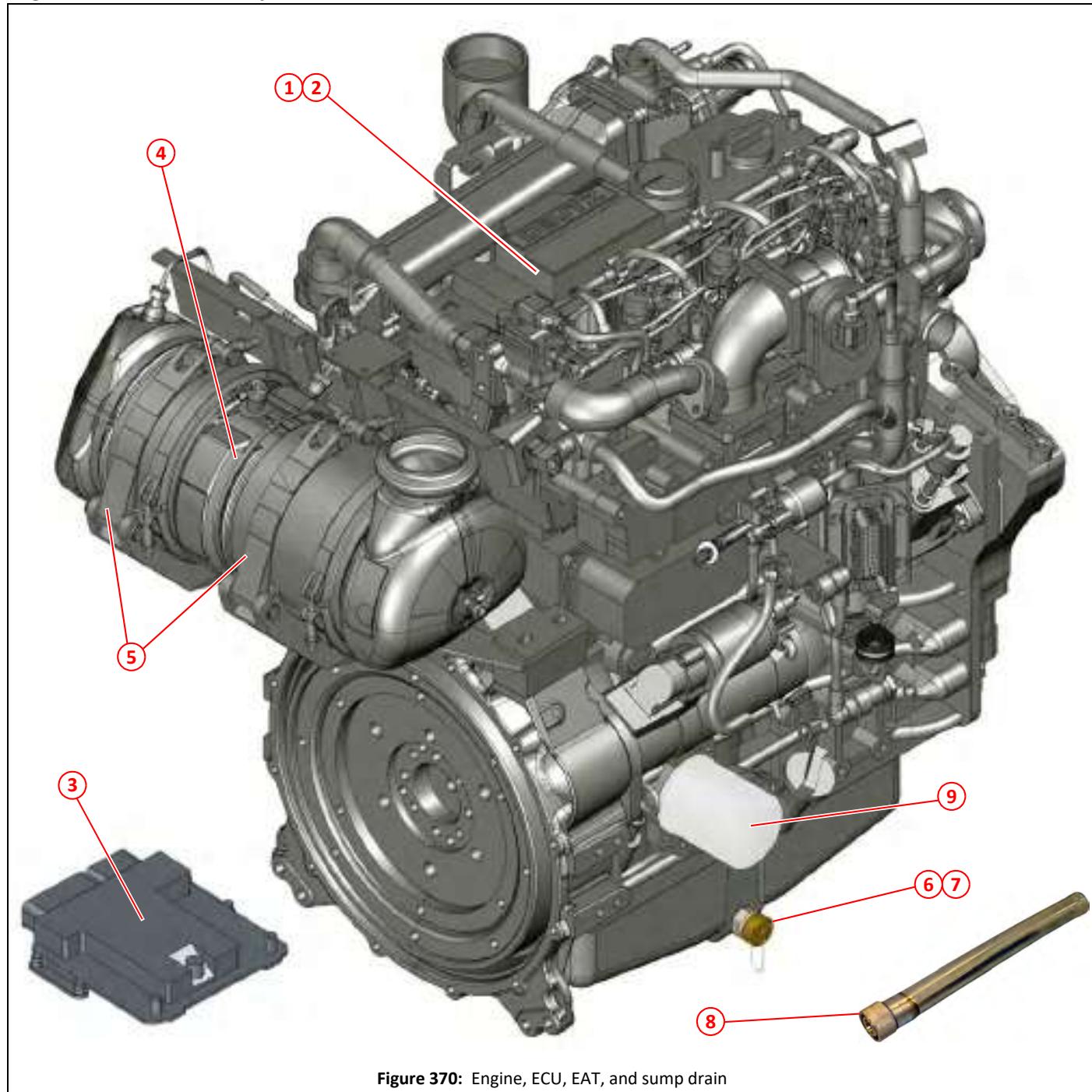
| Item | Part No | Qty | Description               | █ |
|------|---------|-----|---------------------------|---|
| ①    | 043785  | 1   | Pressure sensor, lube oil | █ |

## Injectors and glow plugs



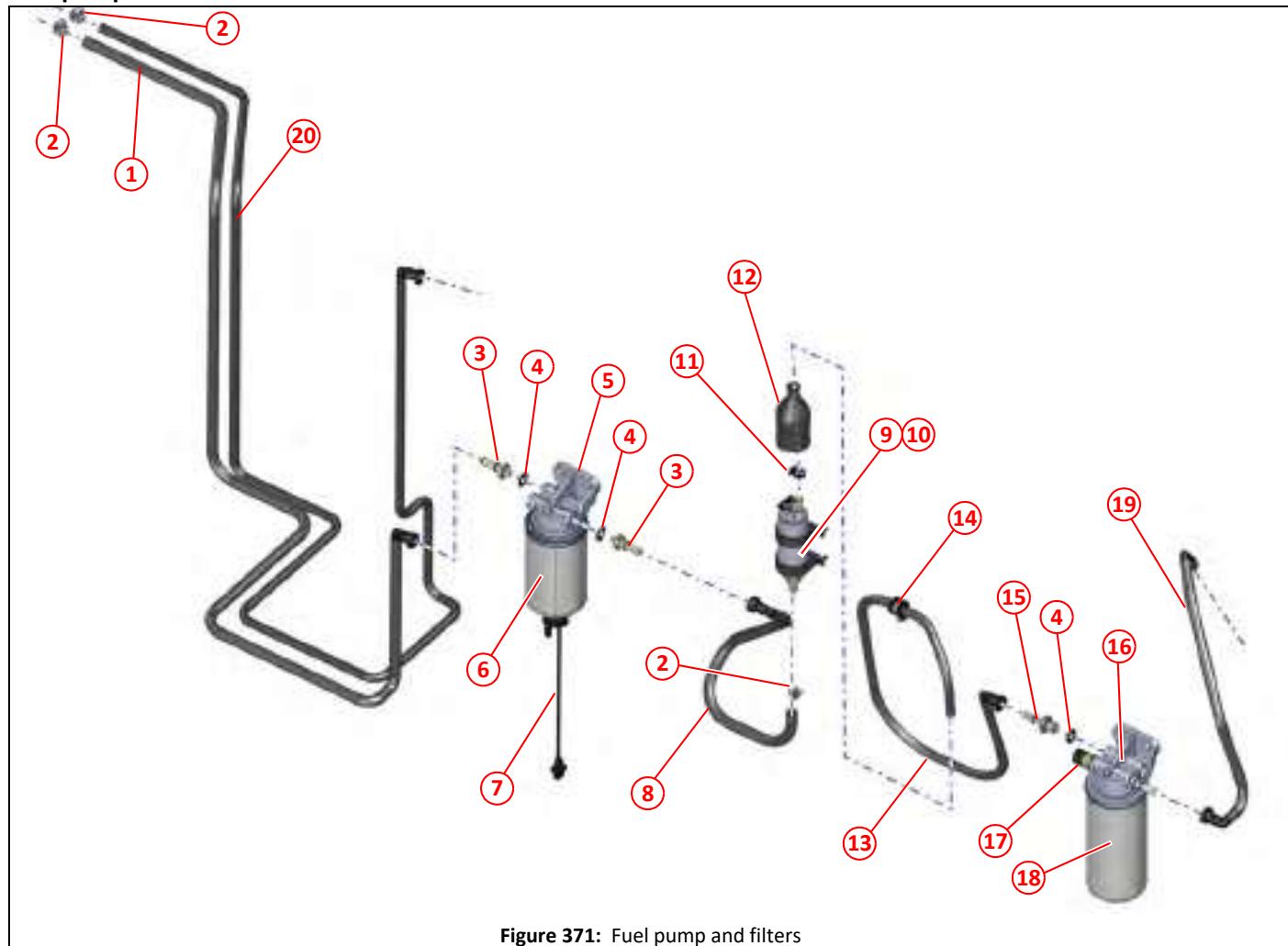
| Item | Part No | Qty | Description    |  |
|------|---------|-----|----------------|--|
| ①    | 043793  | 4   | Fuel injector  |  |
| ②    | 043820  | 4   | Glow plug, 12V |  |
| ③    | 043799  | 4   | Glow plug, 24V |  |

## Engine, ECU, EAT, and sump drain



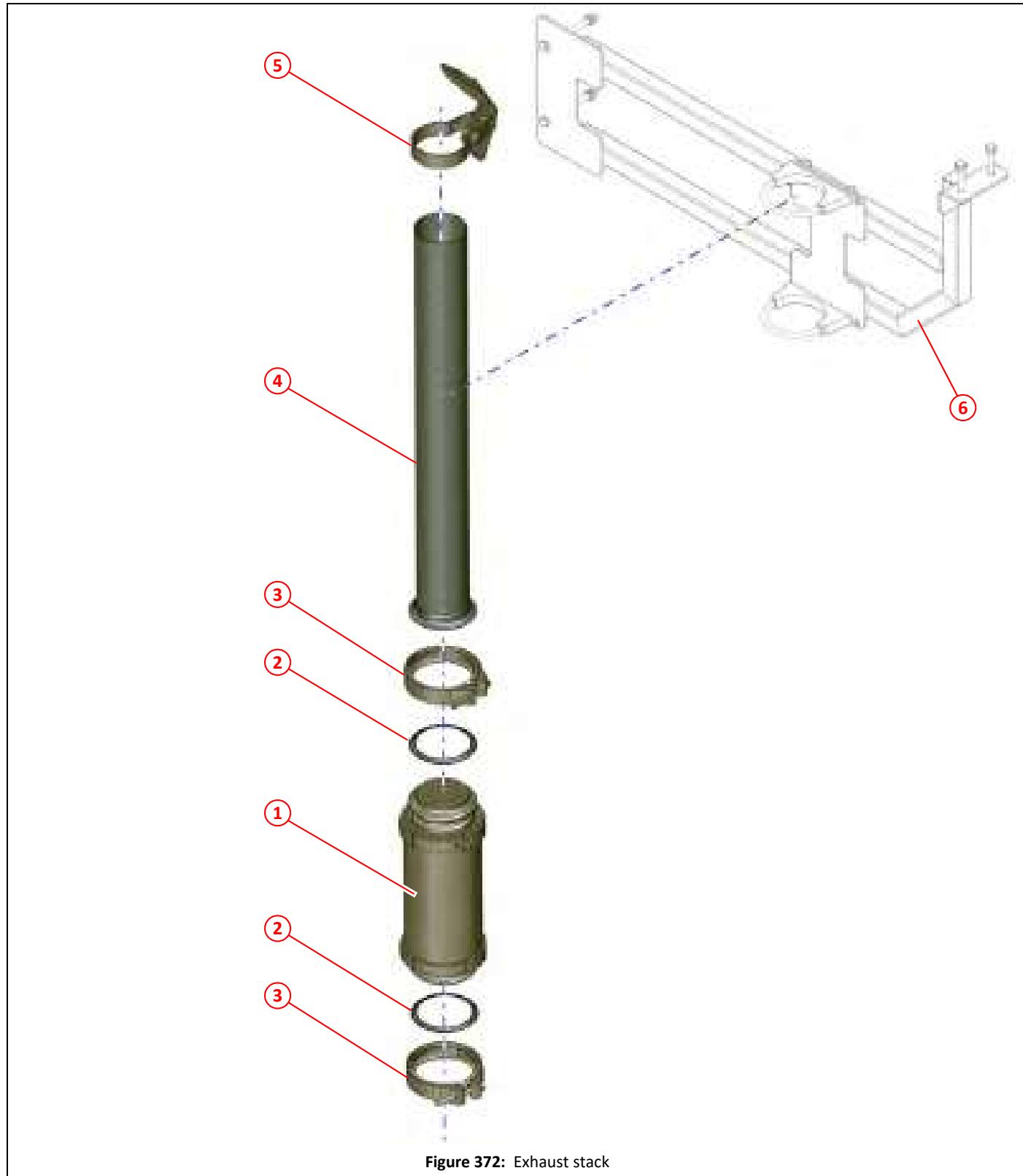
| Item | Part No  | Qty | Description  |
|------|----------|-----|--|
| ①    | 047624   | 1   | DEUTZ 3.6 engine (Stage V), 12V                        |
| ②    | 046169   | 1   | DEUTZ 3.6 engine (Stage V), 24V                        |
| ③    | 046220 * | 1   | ECU, DEUTZ engine 3.6 (Stage V), for both 12V and 24V. |
| ④    | 045980   | 1   | DEUTZ EAT  |
| ⑤    | 045981   | 2   | Clamp, DEUTZ EAT                                       |
| ⑥    | 043568   | 1   | Drain valve, sump                                      |
| ⑦    | 043567   | 1   | Sealing ring, sump drain valve                         |
| ⑧    | 043568   | 1   | Connector and drain hose, sump drain                   |
| ⑨    | 042232   | 1   | Lube oil filter  |

\*. The ECU will need to be matched to the serial number of the DEUTZ auxiliary engine of your vehicle.

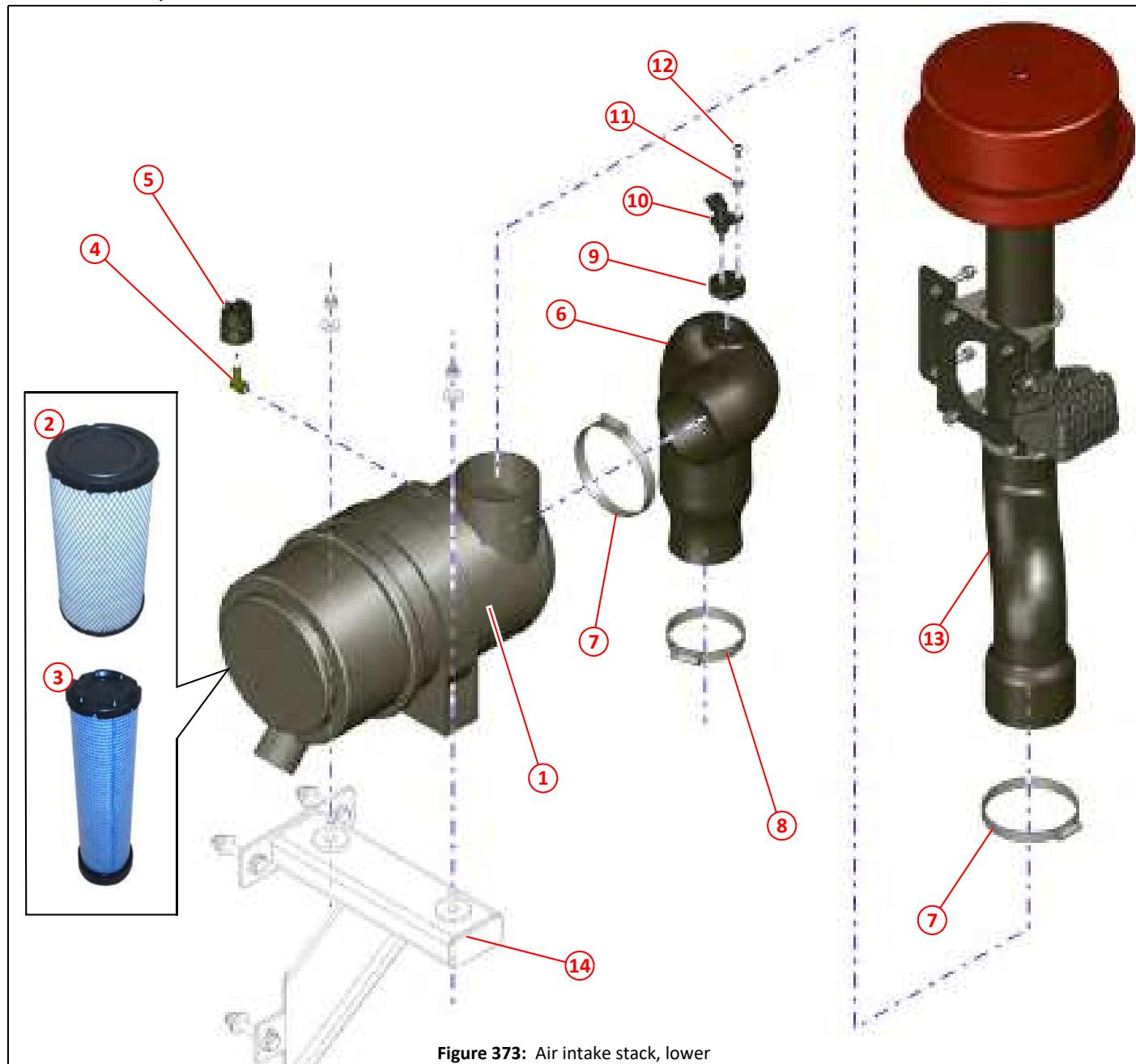
**Fuel pump and filters**

**Figure 371: Fuel pump and filters**

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 047361  | 1   | Fuel hose, tank to primary fuel filter                                     |
| ②    | 005136  | 3   | Jubilee clip No. OOO ( $\varnothing 9.5 - \varnothing 12$ )                |
| ③    | 043647  | 2   | DEUTZ fuel hose fitting  |
| ④    | 011217  | 3   | Dowty seal M16   |
| ⑤    | 041699  | 1   | Primary fuel filter assembly, includes items ⑥ and ⑦.                      |
| ⑥    | 042234  | 1   | Filter element, primary fuel filter, includes item ⑦.                      |
| ⑦    | 045113  | 1   | Water in fuel (WIF) sensor, fuel filter, with cable                        |
| ⑧    | 047362  | 1   | Fuel hose, primary fuel filter to lift pump                                |
| ⑨    | 044515  | 1   | Fuel lift pump, 3.6L4 DEUTZ, 12V   |
| ⑩    | 043370  | 1   | Fuel lift pump, 3.6L4 DEUTZ, 24V   |
| ⑪    | 043709  | 1   | Nylon 6.6 plastic hose clip $\varnothing 15.0 - \varnothing 17.1\text{mm}$ |
| ⑫    | 042604  | 1   | Boot, fuel lift pump   |
| ⑬    | 043034  | 1   | Fuel hose, lift pump to secondary fuel filter                              |
| ⑭    | 000200  | 1   | Clip $\varnothing 18$ , rubber sleeved                                     |
| ⑮    | 042903  | 1   | M16 to $\frac{3}{8}''$ (SAE J2044), quick change adapter                   |
| ⑯    | 043035  | 1   | Secondary fuel filter assembly, includes item ⑰.                           |
| ⑰    | 043785  | 1   | Pressure sensor, secondary fuel filter                                     |
| ⑱    | 043786  | 1   | Filter element, secondary fuel filter                                      |
| ⑲    | 043033  | 1   | Fuel hose, secondary filter to engine                                      |
| ⑳    | 043031  | 1   | Fuel hose, return to tank  |

## Exhaust stack



| Item | Part No | Qty | Description               |     |
|------|---------|-----|---------------------------|-----|
| ①    | 041693  | 1   | Flexible union, exhaust   |     |
| ②    | 041697  | 2   | Compression seal, exhaust |     |
| ③    | 041694  | 2   | V clamp, exhaust          |     |
| ④    | 046945  | 1   | Exhaust stack             |     |
| ⑤    | 041907  | 1   | Exhaust rain cap          |     |
| ⑥    | 046944  | 1   | Exhaust support           | 369 |

**Air intake stack, lower**

**Figure 373: Air intake stack, lower**

| Item | Part No | Qty | Description                                  |     |
|------|---------|-----|--|-----|
| ①    | 025279  | 1   | Air cleaner assembly, includes items ② and ③ |     |
| ②    | 025280  | 1   | Element, main, air cleaner                   |     |
| ③    | 025281  | 1   | Element, safety, air cleaner                 |     |
| ④    | 034343  | 1   | Elbow, filter blocked sender                 |     |
| ⑤    | 042136  | 1   | Sender, filter blocked, 5.0kPa               |     |
| ⑥    | 046552  | 1   | Air inlet hose 'A' (Stage V)                 |     |
| ⑦    | 003003  | 2   | Jubilee clip No 5 [ø90 - ø120]               |     |
| ⑧    | 012931  | 1   | Jubilee clip No 4 [ø70 - ø90]                |     |
| ⑨    | 046553  | 1   | Insert, air inlet hose (Stage V)             |     |
| ⑩    | 047146  | 1   | Temperature sensor (Stage V)                 |     |
| ⑪    | 011090  | 1   | Washer M6                                    |     |
| ⑫    | 000518  | 1   | Button head socket screw M6 x 12, plated     |     |
| ⑬    |         |     | Air intake stack, upper                      | 412 |
| ⑭    | 042920  | 1   | Air cleaner mounting bracket                 | 370 |

## Air intake stack, upper

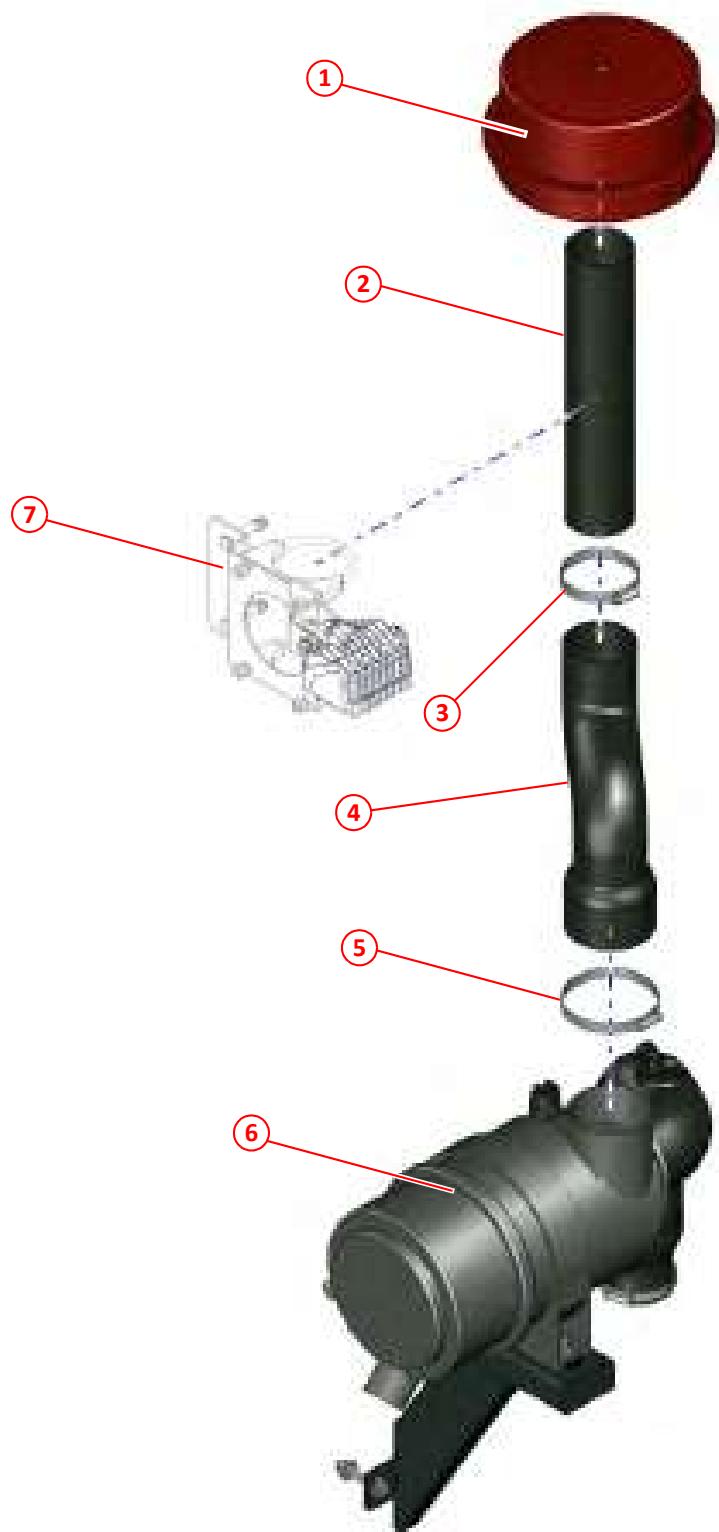
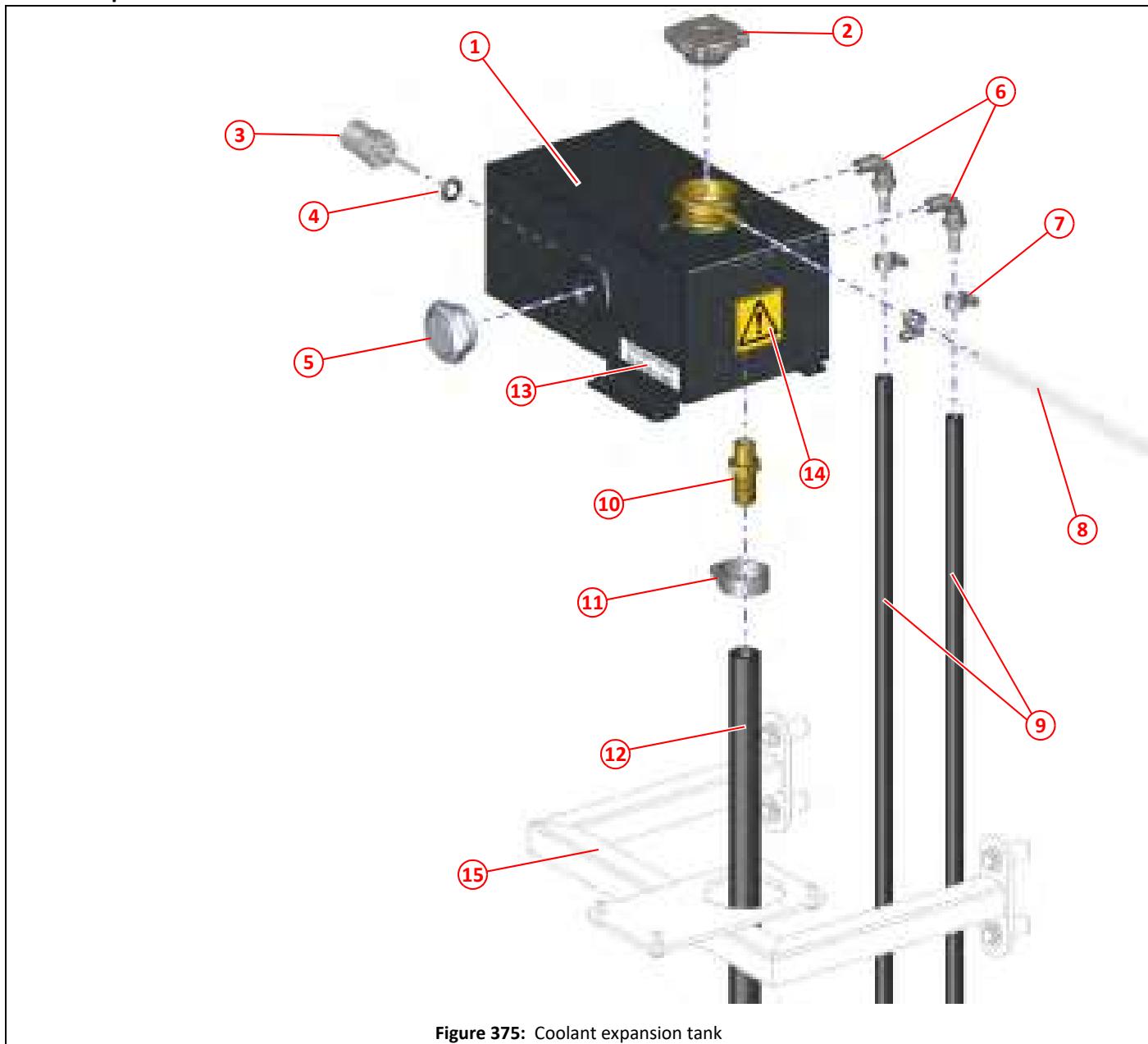


Figure 374: Air intake stack, upper

| Item | Part No | Qty | Description  |     |
|------|---------|-----|--|-----|
| ①    | 043680  | 1   | Pre-cleaner cyclonic                                     |     |
| ②    | 042915  | 1   | Air intake stack   |     |
| ③    | 012931  | 1   | Jubilee clip No 4 [ $\varnothing 70 - \varnothing 90$ ]  |     |
| ④    | 042999  | 1   | Air inlet hose 'B' (Stage V)                             |     |
| ⑤    | 003003  | 1   | Jubilee clip No 5 [ $\varnothing 90 - \varnothing 120$ ] |     |
| ⑥    | 025279  | 1   | Air cleaner assembly                                     | 411 |
| ⑦    | 046948  | 1   | Air stack bracket  | 370 |

**Coolant expansion tank**

**Figure 375:** Coolant expansion tank

| Item | Part No | Qty | Description  |
|------|---------|-----|--|
| ①    | 041936  | 1   | Expansion tank   |
| ②    | 041945  | 1   | Filler neck cap, expansion tank                            |
| ③    | 041698  | 1   | Expansion tank level sensor                                |
| ④    | 011216  | 1   | Dowty seal M14   |
| ⑤    | 042333  | 1   | Bulls-eye sight glass, 1 <sup>1</sup> / <sub>4</sub> " BSP |
| ⑥    | 010910  | 2   | Elbow, male/female 1 <sup>1</sup> / <sub>4</sub> " BSP     |
| ⑦    | 010516  | 3   | Jubilee clip No MOO [Ø11 - Ø16]                            |
| ⑧    | 010951  | 1   | Hose 3/8", clear   |
| ⑨    | 001035  | 2   | Hose 8mm heater hose                                       |
| ⑩    | 025181  | 1   | 1/2" BSP to 3/4" hosetail                                  |
| ⑪    | 014828  | 1   | Jubilee clip, high torque, size 70 (Ø25 - Ø40mm)           |
| ⑫    | 002188  | 1   | Hose 3/4" fuel R6  |
| ⑬    | 036223  | 1   | Label - Coolant grade                                      |
| ⑭    | 043693  | 1   | Label - Hazard   |
| ⑮    | 046946  | 1   | Expansion tank mounting bracket                            |

## Combined oil/intercooler/radiator cooler

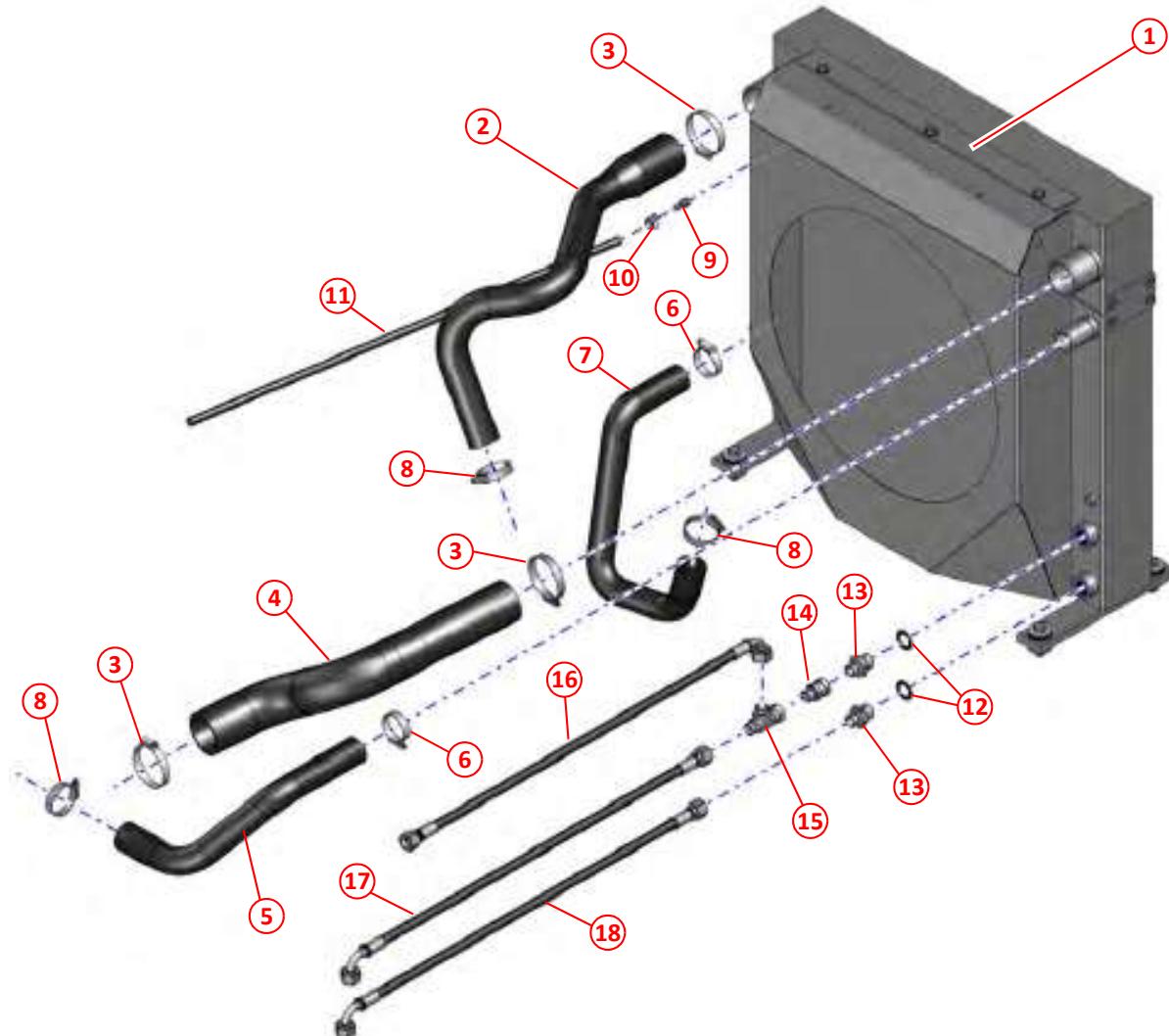
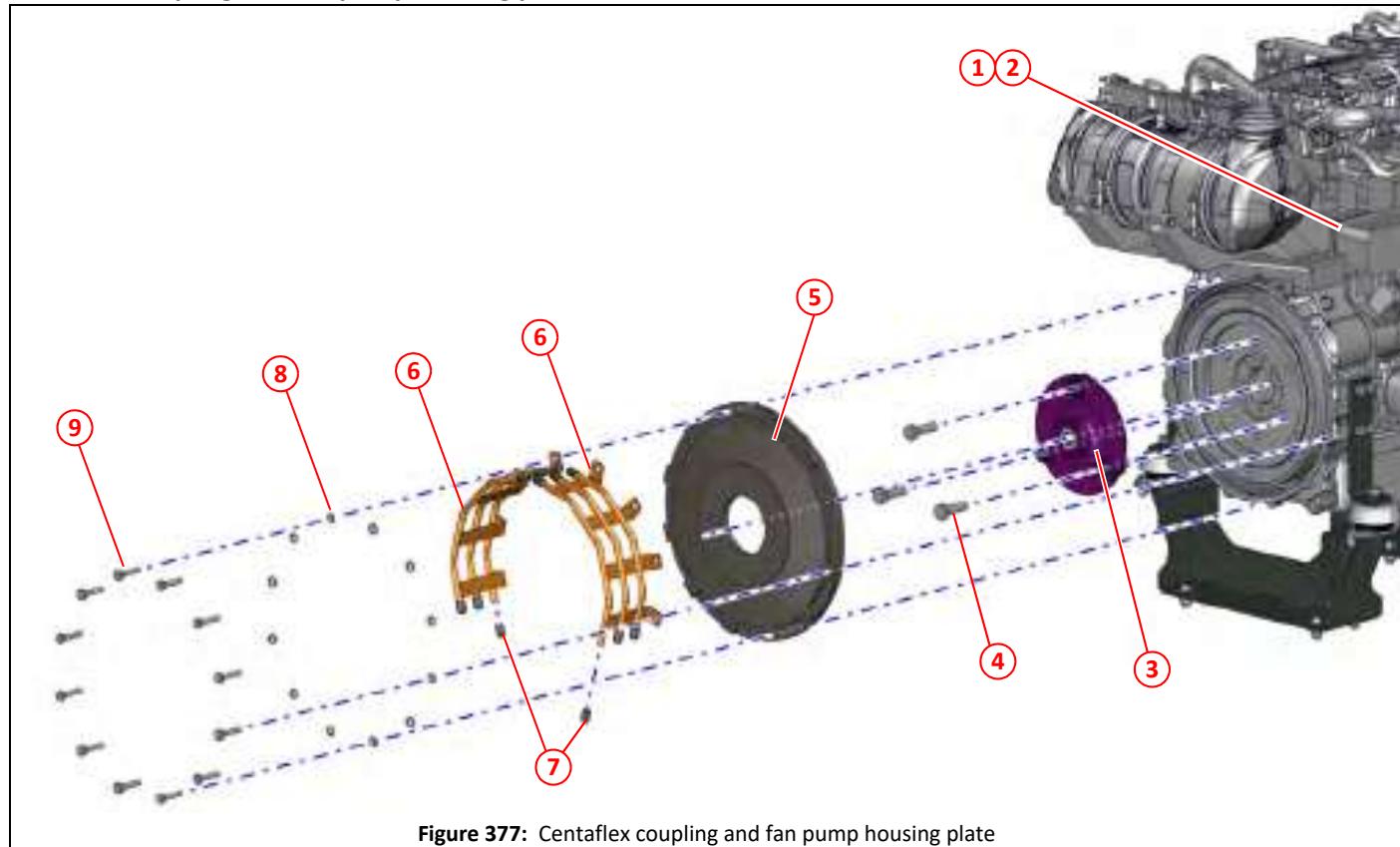


Figure 376: Combined oil/intercooler/radiator cooler

| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| ①    | 046549  | 1   | Combined oil/intercooler/radiator (Stage V)                   | 364 |
| ②    | 042893  | 1   | Intercooler hose 'A'  |     |
| ③    | 010595  | 3   | Jubilee clip No 3 [Ø55 - Ø70]                                 |     |
| ④    | 033591  | 1   | Intercooler hose 'B'  |     |
| ⑤    | 042895  | 1   | Coolant hose 'A'  |     |
| ⑥    | 003007  | 2   | Jubilee clip 2A [Ø35 - Ø50]                                   |     |
| ⑦    | 042896  | 1   | Coolant hose 'B'  |     |
| ⑧    | 012927  | 3   | Jubilee clip No 2 [Ø40 - Ø55]                                 |     |
| ⑨    | 006044  | 1   | 1/4" BSP male x 8mm hose tail                                 |     |
| ⑩    | 010516  | 1   | Jubilee clip No MOO [Ø11 - Ø16]                               |     |
| ⑪    | 001035  | 1   | Hose 8mm heater hose, from expansion tank                     |     |
| ⑫    | 002082  | 2   | Dowty seal M26  |     |
| ⑬    | 002074  | 2   | Adapter M26 x 1/2" BSP  |     |
| ⑭    | 011177  | 1   | Swivel adapter, male/female, 1/2" BSP                         |     |
| ⑮    | 011182  | 1   | Tee, nut on run, 1/2" BSP                                     |     |
| ⑯    | 001328  | 1   | Hose 1/2" BSP x 970, straight/90°, to T2 on Main valve block  | 278 |
| ⑰    | 030992  | 1   | Hose 1/2" BSP x 1100, straight/90°, to T1 on Main valve block | 278 |
| ⑱    | 001368  | 1   | Hose 1/2" BSP x 3370, straight/90°                            |     |

**Centaflex coupling and fan pump housing plate**

**Figure 377: Centaflex coupling and fan pump housing plate**

| Item | Part No | Qty | Description                     |
|------|---------|-----|---------------------------------|
| ①    | 047624  | 1   | DEUTZ 3.6 engine (Stage V), 12V |
| ②    | 046169  | 1   | DEUTZ 3.6 engine (Stage V), 24V |
| ③    | 043081  | 1   | Centaflex KE coupling           |
| ④    | 000473  | 3   | Setscrew HT M16 x 2 x 50        |
| ⑤    | 042813  | 1   | Adapter plate                   |
| ⑥    | 042979  | 2   | Cable guide, adapter plate      |
| ⑦    | 043065  | 12  | Pipe cap ø12                    |
| ⑧    | 011095  | 12  | Spring washer M10               |
| ⑨    | 000072  | 12  | Setscrew HT M10 x 45            |

**Service kits**

| Part No      | Description                  | File |
|--------------|------------------------------|------|
| SCAKIT046243 | Service kit every 500 hours  |      |
| SCAKIT046244 | Service kit every 1000 hours |      |
| SCAKIT048687 | Service kit every 2000 hours |      |
| SCAKIT046246 | Service kit every 3000 hours |      |

# Cab

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| Main control panel .....                                    | 420         |
| Auxiliary (door pod) control panel and node mountings ..... | 421         |
| Auxiliary controller (door pod) .....                       | 422         |
| Operator screen and camera monitor mounting .....           | 423         |
| Main control panel and operator screen mountings .....      | 424         |
| Brush pressure valve, gauge and controls .....              | 425         |
| Remote hopper controller .....                              | 426         |
| Other components, cab components .....                      | 427         |

# Cab

## General layout of cab items

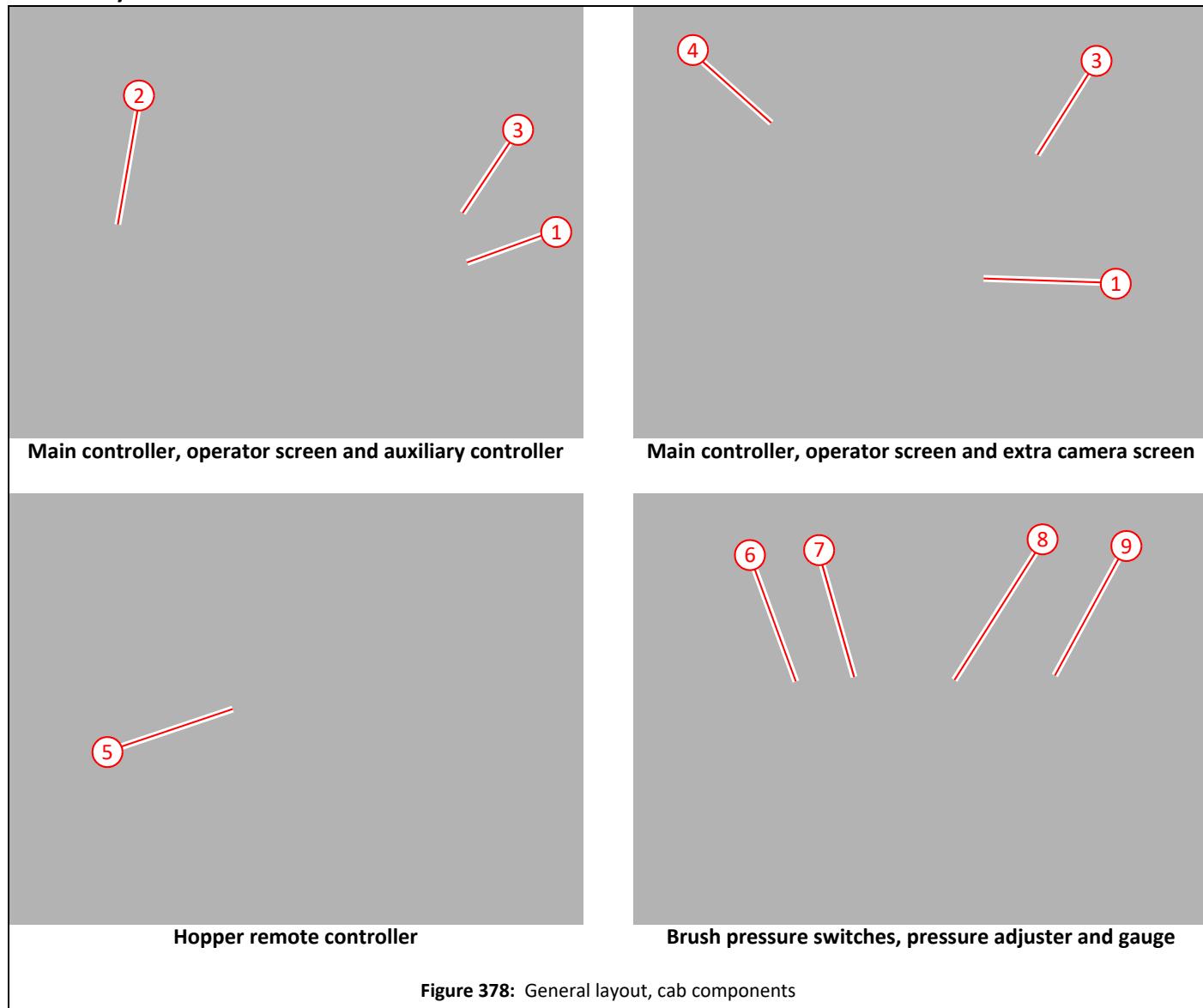


Figure 378: General layout, cab components

| Item | Part No | Qty | Description                                |         |
|------|---------|-----|--|---------|
| ①    |         |     | Main control panel                         | 336,419 |
| ②    |         |     | Auxiliary control panel (door pod)         | 337,421 |
| ③    |         |     | Operator screen                            | 419     |
| ④    |         |     | Camera screen                              | 419     |
| ⑤    |         |     | Hopper remote controller                   |         |
| ⑥    |         |     | Side brush pressure switch                 |         |
| ⑦    |         |     | Central brush (wide sweep) pressure switch |         |
| ⑧    |         |     | Pressure adjuster, brush                   |         |
| ⑨    |         |     | Pressure gauge, brush                      |         |

Please note that any mounting brackets etc. in the cab area are chassis specific, when ordering parts please have you sweepers serial number and also the type of chassis it is built on available.

## Main control panel and operator screen mountings

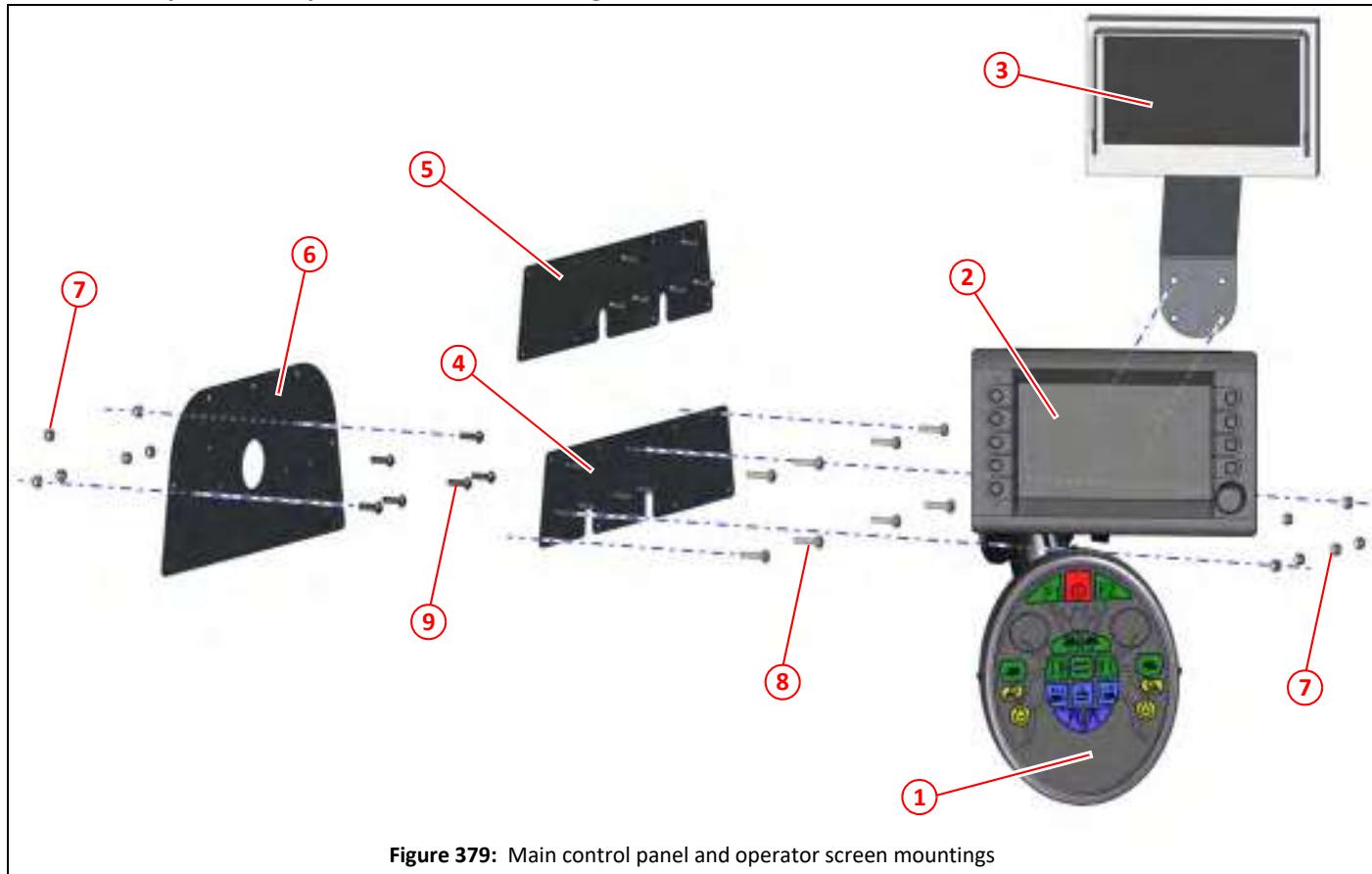


Figure 379: Main control panel and operator screen mountings

| Item | Part No  | Qty | Description                               |     |
|------|----------|-----|---|-----|
| ①    | 037602   | 1   | Main control panel, keypad and fascia     | 420 |
| ②    | 051757   | 1   | Operator screen                           | 418 |
| ③    | 040717 * | 1   | Camera monitor                            | 418 |
| ④    | 042034 † | 1   | Keypad and screen plate, left hand drive  |     |
| ⑤    | 043042 † | 1   | Keypad and screen plate, right hand drive |     |
| ⑥    | 037297 † | 1   | Keypad and screen plate                   |     |
| ⑦    | 000155   | 6   | Nyloc nut M5                              |     |
| ⑧    | 000402   | 8   | Pan head POZIDRIV screw M5 x 20           |     |
| ⑨    | 000346   | 6   | Socket button head screw M5 x 16, black   |     |

\*. Various monitors are available for camera viewing, Please contact Scarab Parts Department.

†. These items are chassis specific and are shown as examples.

When ordering parts please have your sweeper serial number and type of chassis it is built on available.

***Due to the many chassis and variants available it is not practical to list all of the fittings and quantities for attaching items to the chassis, please use appropriate fittings and if in any doubt contact Scarab Sweepers for advice.***

## Main control panel

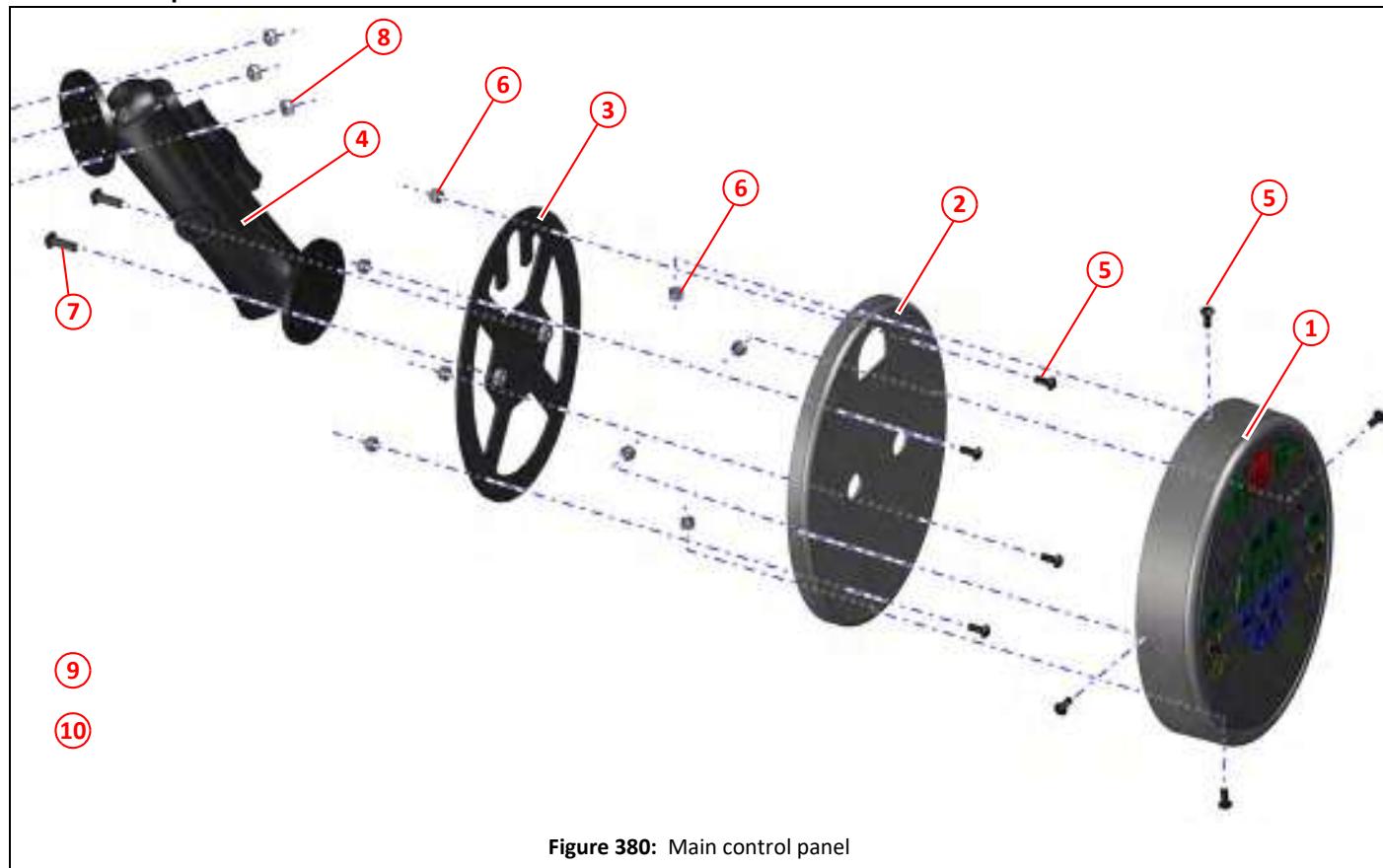
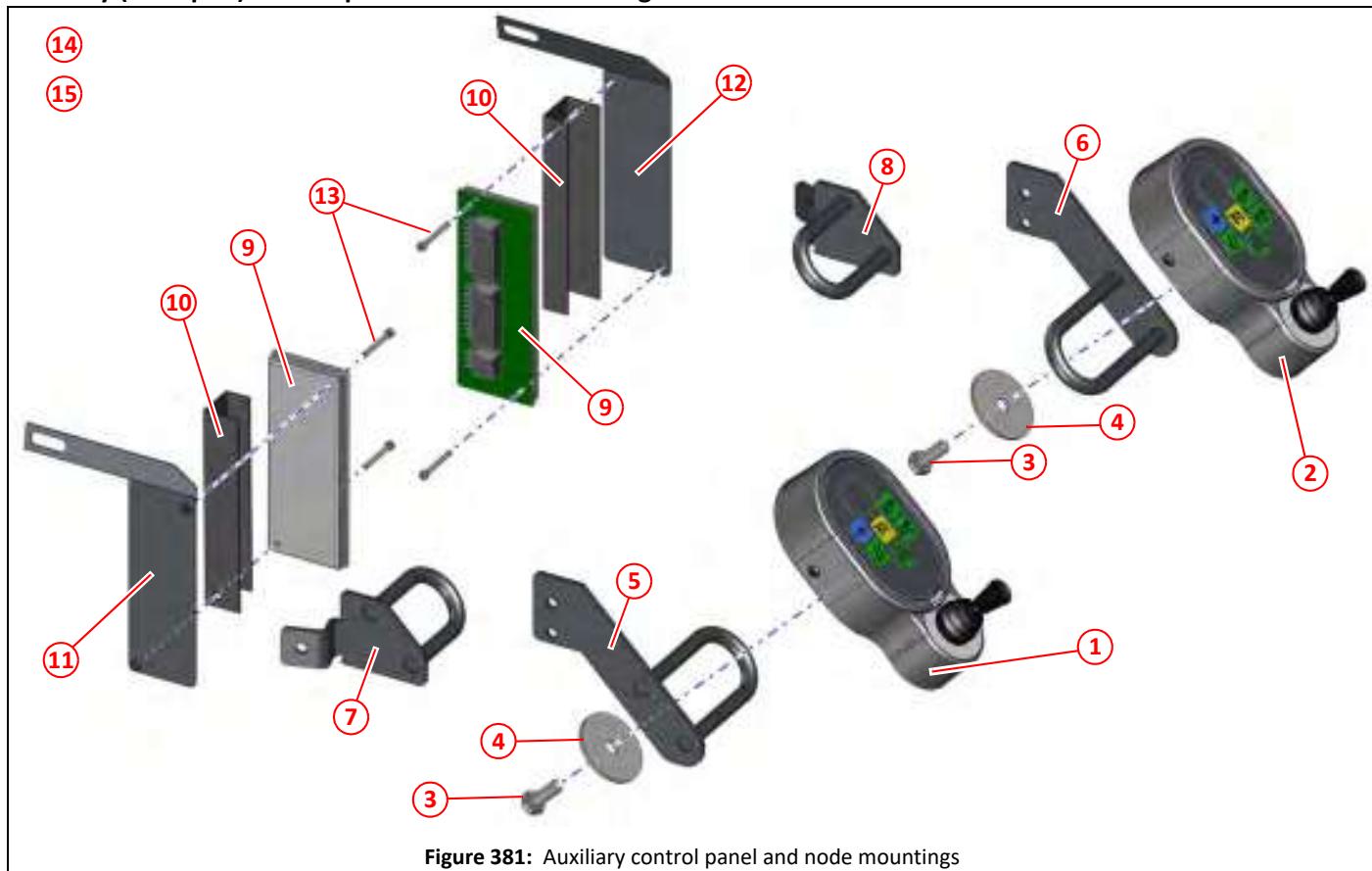


Figure 380: Main control panel

| Item | Part No | Qty | Description                             |             |
|------|---------|-----|---|-------------|
| ①    | 037602  | 1   | Keypad fascia kit, main control pane    | 336,418,419 |
| ②    | 037053  | 1   | Backplate, main control panel           |             |
| ③    | 037055  | 1   | Spider plate. main control panel        |             |
| ④    | 032108  | 1   | Adjustable panel mount, ram             |             |
| ⑤    | 000304  | 8   | Socket button head screw M4 x 10, black |             |
| ⑥    | 000134  | 8   | Nyloc nut M4                            |             |
| ⑦    | 000346  | 2   | Socket button head screw M5 x 16, black |             |
| ⑧    | 000155  | 3   | Nyloc nut M5                            |             |
| ⑨    | 036912  | 1   | Loom, main control panel                | 336,350     |
| ⑩    | 036914  | 1   | Loom, power/CAN, main control panel     | 336,350     |

**Due to the many chassis and variants available it is not practical to list all of the fittings for attaching items to the chassis, please use appropriate fittings and if in any doubt contact Scarab Sweepers for advice.**

**Auxiliary (door pod) control panel and node mountings**


| Item | Part No  | Qty | Description  |         |
|------|----------|-----|--|---------|
| ①    | 037606 * | 1   | Auxiliary controller (door pod), left hand side, includes items ③ and ④  | 337     |
| ②    | 037607 * | 1   | Auxiliary controller (door pod), right hand side, includes items ③ and ④ | 337     |
| ③    | 011031 * | 1   | Setscrew HT M10 x 25   |         |
| ④    | 011031 * | 1   | Door pod lock washer   |         |
| ⑤    | 037866 * | 1   | Auxiliary controller (door pod) mount, left hand side                    |         |
| ⑥    | 037296 * | 1   | Auxiliary controller (door pod) mount, right hand side                   |         |
| ⑦    | 033427 * | 1   | Auxiliary controller (door pod) mount, left hand side                    |         |
| ⑧    | 033317 * | 1   | Auxiliary controller (door pod) mount, right hand side                   |         |
| ⑨    | 036799 * | 1   | CR2012 cabinet module, (node)  | 338     |
| ⑩    | 044290 * | 1   | Black plastic extrusion  |         |
| ⑪    | 042041 * | 1   | Bracket, node (cabinet module), left hand side                           |         |
| ⑫    | 043073 * | 1   | Bracket, node (cabinet module), right hand side                          |         |
| ⑬    | 000152 * | 2   | Socket cap head screw M4 x 3   |         |
| ⑭    | 036913 * | 1   | Loom, auxiliary control panel (door pod)                                 | 337,350 |
| ⑮    | 036915 * | 1   | Loom, power/CAN, auxiliary control panel (door pod)                      | 337,350 |

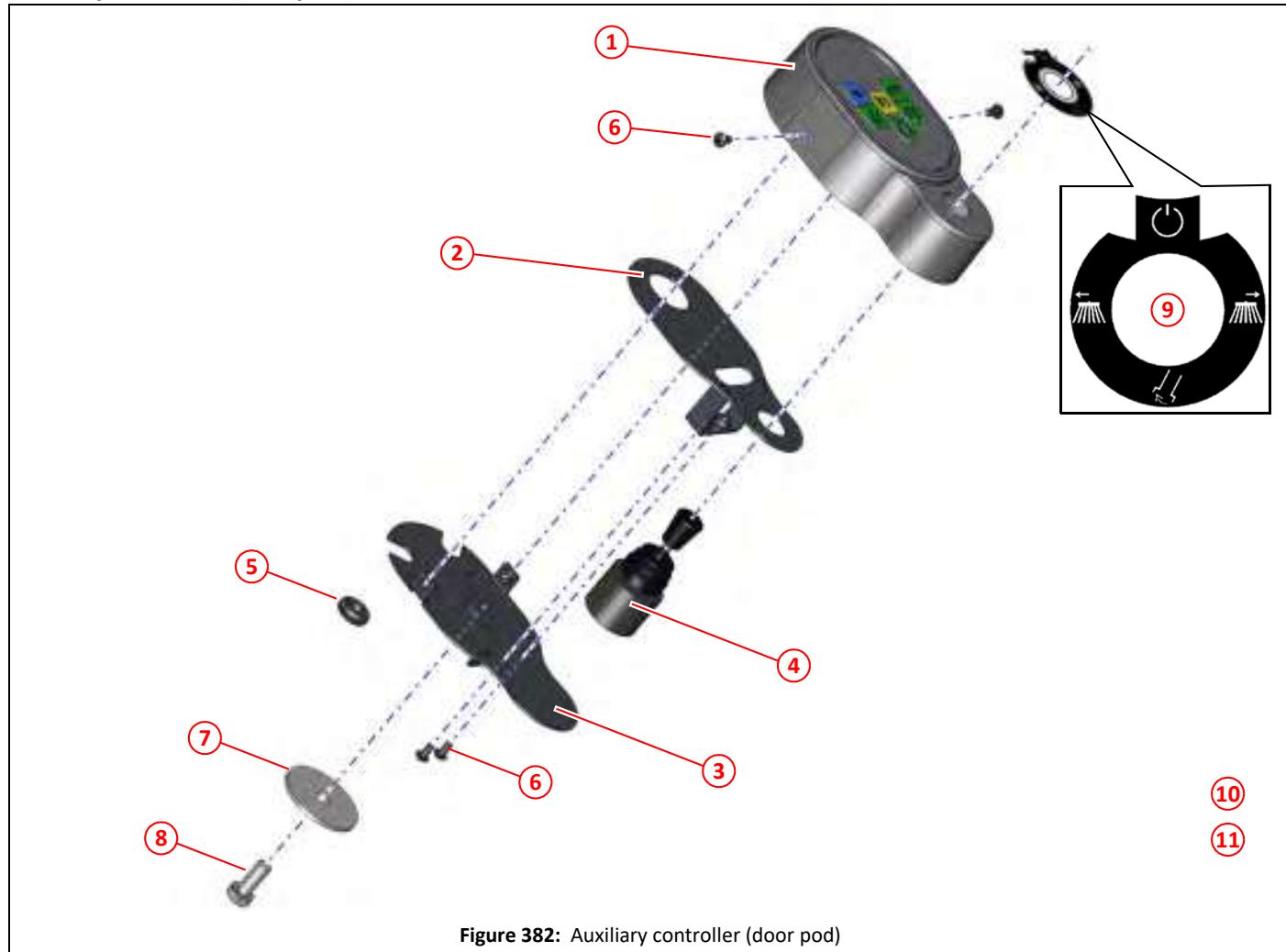
\*. These are examples of brackets for mounting the auxiliary controller and/or the nodes (cabinet modules). If ordering, then please contact Scarab Parts Department and have your sweeper serial number and type of chassis it is built on available, to ensure correct parts selection.

Any quantities shown are per controller/node.

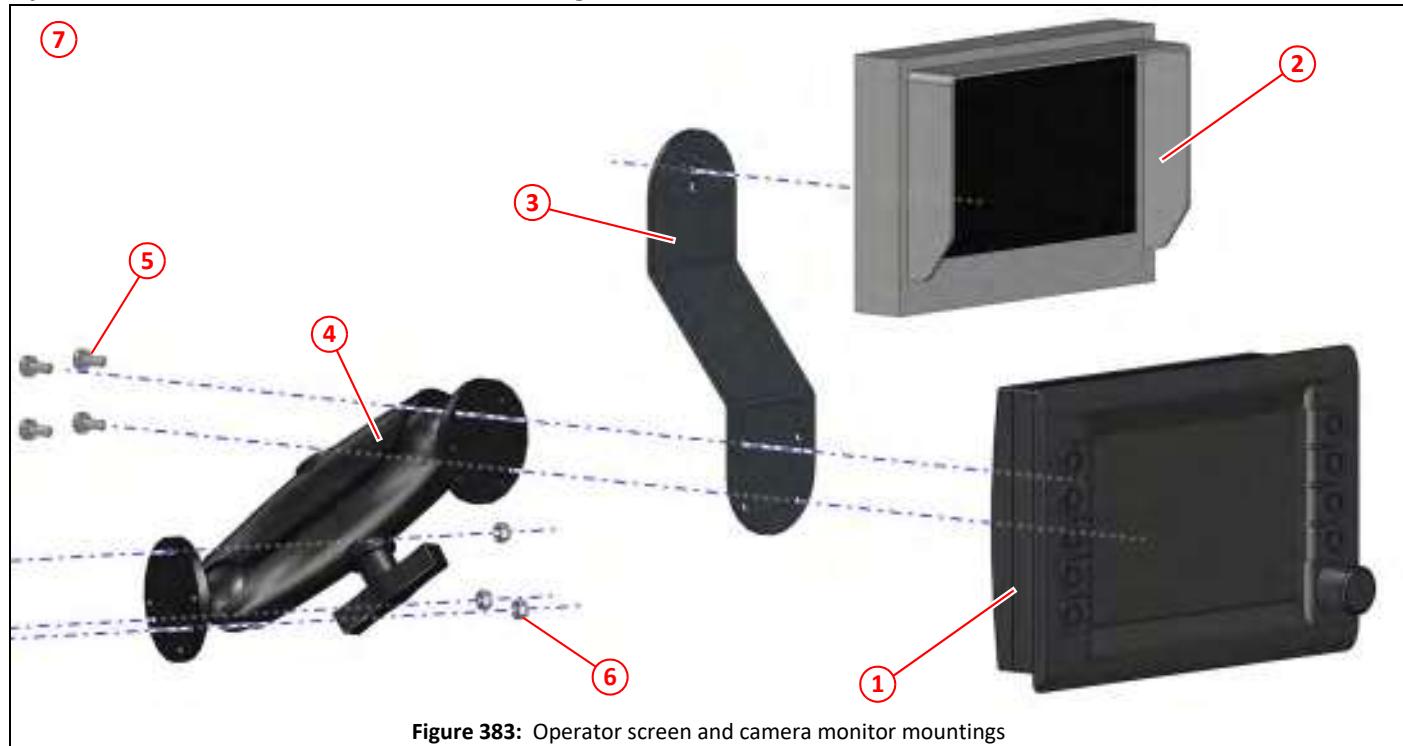
If dual steer then both left and right controllers/nodes will be fitted.

**Due to the many chassis and variants available it is not practical to list all of the fittings for attaching items to the chassis, please use appropriate fittings and if in any doubt contact Scarab Sweepers for advice.**

## Auxiliary controller (door pod)



| Item | Part No | Qty | Description   |                 |
|------|---------|-----|---|-----------------|
| ①    | 037608  | 1   | Auxiliary controller (door pod), fascia and keypad  | 337,418,419,421 |
| ②    | 037057  | 1   | Support plate, auxiliary controller (door pod)V3    |                 |
| ③    | 037058  | 1   | Backplate, auxiliary controller (door pod)          |                 |
| ④    | 036873  | 1   | Ergo joystick                                       |                 |
| ⑤    | 046259  | 1   | Grommet, semi blind, ø15.9                          |                 |
| ⑥    | 000380  | 4   | Socket button head screw M4 x 10, black             |                 |
| ⑦    | 037064  | 1   | Door pod lock washer                                |                 |
| ⑧    | 011031  | 1   | Setscrew HT M10 x 25                                |                 |
| ⑨    | 039545  | 1   | Label, ergo joystick                                |                 |
| ⑩    | 036913  | 1   | Loom, auxiliary control panel (door pod)            | 350             |
| ⑪    | 036915  | 1   | Loom, power/CAN, auxiliary control panel (door pod) | 350             |

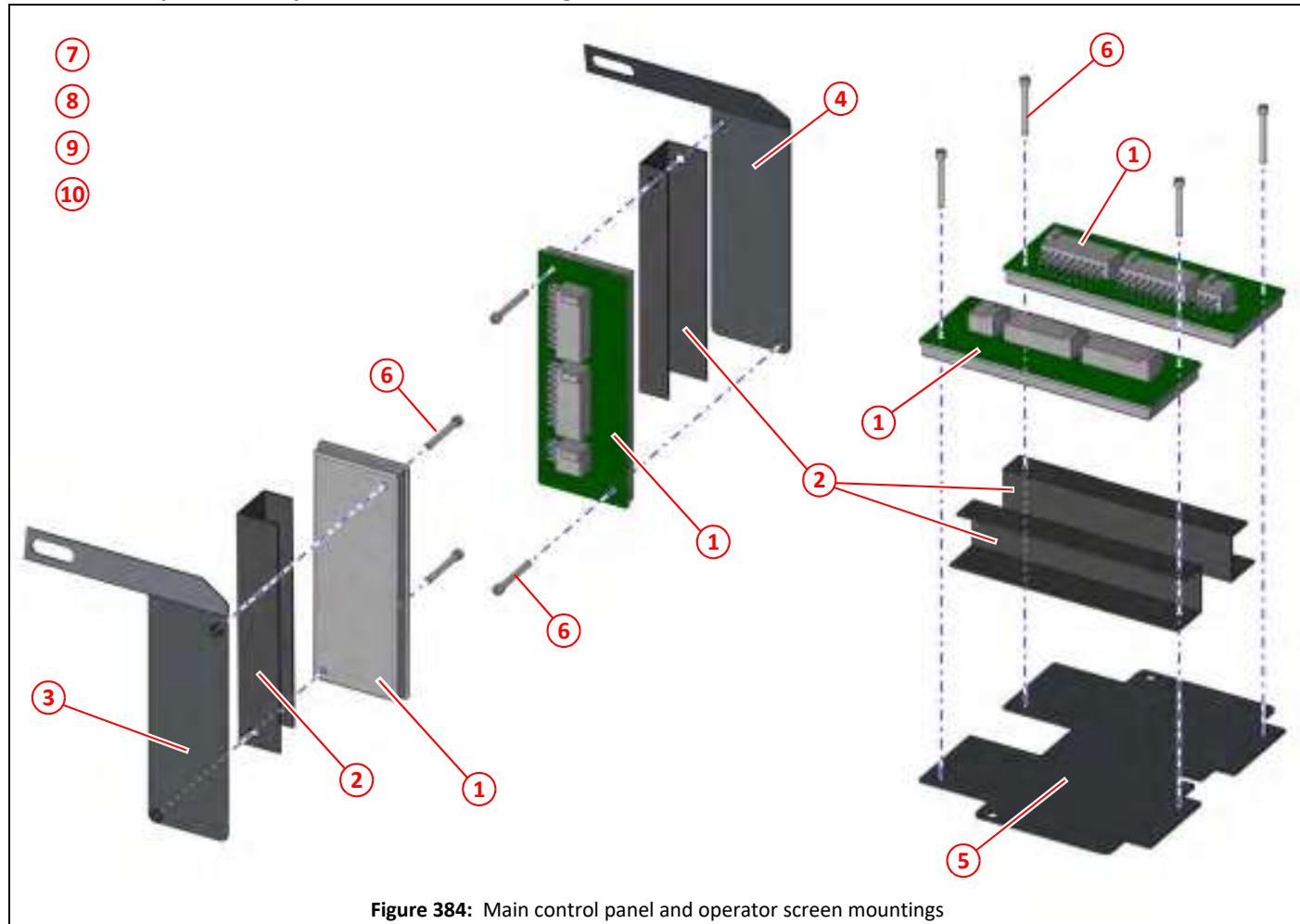
**Operator screen and camera monitor mounting**

**Figure 383:** Operator screen and camera monitor mountings

| Item | Part No  | Qty | Description                     |             |
|------|----------|-----|---------------------------------|-------------|
| ①    | 051757   | 1   | Operator screen                 | 338,418,419 |
| ②    | 040717 * | 1   | Camera monitor                  | 339,418,419 |
| ③    | 047903 † | 1   | Mounting bracket, camera screen |             |
| ④    | 032108   | 1   | Adjustable panel mount, ram     |             |
| ⑤    | 100103   | 4   | Pan head POZIDRIV screw M5 x 12 |             |
| ⑥    | 000155   | 3   | Nyloc nut M5                    |             |
| ⑦    | 040349   | 1   | Loom, screen                    | 350         |

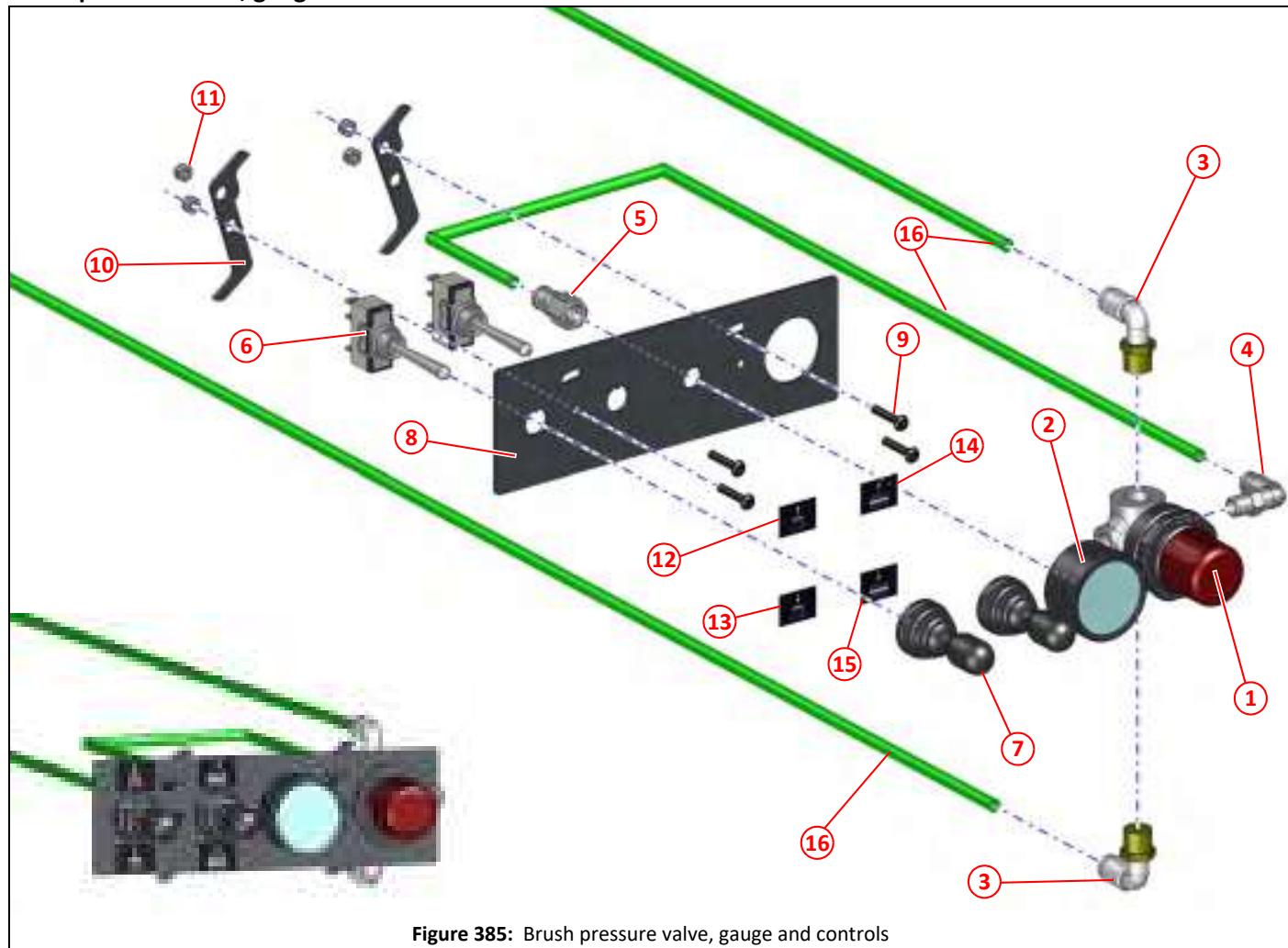
\*. Various monitors are available for camera viewing, Please contact Scarab Parts Department.

†. This is an examples bracket for mounting the camera screen. If ordering, then please contact Scarab Parts Department and have your sweeper serial number and type of chassis it is built on available, to ensure correct parts selection.

## Main control panel and operator screen mountings



| Item | Part No | Qty | Description   |     |
|------|---------|-----|---|-----|
| ①    | 036799  | 4   | CR2012 cabinet module, (node)                       | 338 |
| ②    | 044290  | 4   | Black plastic extrusion                             |     |
| ③    | 042041  | 1   | Bracket, node (cabinet module), left hand side      |     |
| ④    | 043073  | 1   | Bracket, node (cabinet module), right hand side     |     |
| ⑤    | 042045  | 1   | Mounting plate, node (cabinet module)               |     |
| ⑥    | 000152  | 8   | Socket cap head screw M4 x 3                        |     |
| ⑦    | 036913  | 1   | Loom, auxiliary control panel (door pod)            | 350 |
| ⑧    | 036915  | 1   | Loom, power/CAN, auxiliary control panel (door pod) | 350 |
| ⑨    | 036912  | 1   | Loom, main control panel                            | 350 |
| ⑩    | 036914  | 1   | Loom, power/CAN, main control panel                 | 350 |

**Brush pressure valve, gauge and controls**

**Figure 385: Brush pressure valve, gauge and controls**

| Item | Part No | Qty | Description                                      |
|------|---------|-----|--|
| ①    | 023242  | 1   | Mini pressure regulator 0.5 - 3.5bar             |
| ②    | 023246  | 1   | Pressure gauge 0-10bar                           |
| ③    | 024646  | 2   | Elbow, swivel, $\frac{1}{4}$ " BSP x ø6 push in  |
| ④    | 006007  | 1   | Elbow, $\frac{1}{8}$ " BSP x ø6 push in          |
| ⑤    | 006032  | 1   | Adapter, $\frac{1}{8}$ " BSP x ø6 push in        |
| ⑥    | 037248  | 2   | Toggle switch on/off/on                          |
| ⑦    | 037247  | 2   | Rubber boot for toggle switch                    |
| ⑧    | 046628  | 1   | Universal air regulator plate                    |
| ⑨    | 000515  | 4   | Socket button head set screw HD M4 x 20 black    |
| ⑩    | 046615  | 2   | Clamp arm for universal air regulator plate      |
| ⑪    | 000134  | 4   | Nyloc nut T M4                                   |
| ⑫    | 038117  | 1   | Label - Side brush up pressure                   |
| ⑬    | 038118  | 1   | Label - Side brush down pressure                 |
| ⑭    | 038119  | 1   | Label - Central brush (wide sweep) up pressure   |
| ⑮    | 038120  | 1   | Label - Central brush (wide sweep) down pressure |
| ⑯    | 024650  | 3   | ø6mm green air pipe, cut to length as required   |

Typical items used in cab, actual items will depend on the specification of the sweeper and cab layout. Contact Scarab Parts Department with the sweepers serial number and type of chassis for more information regarding these items.

## Remote hopper controller

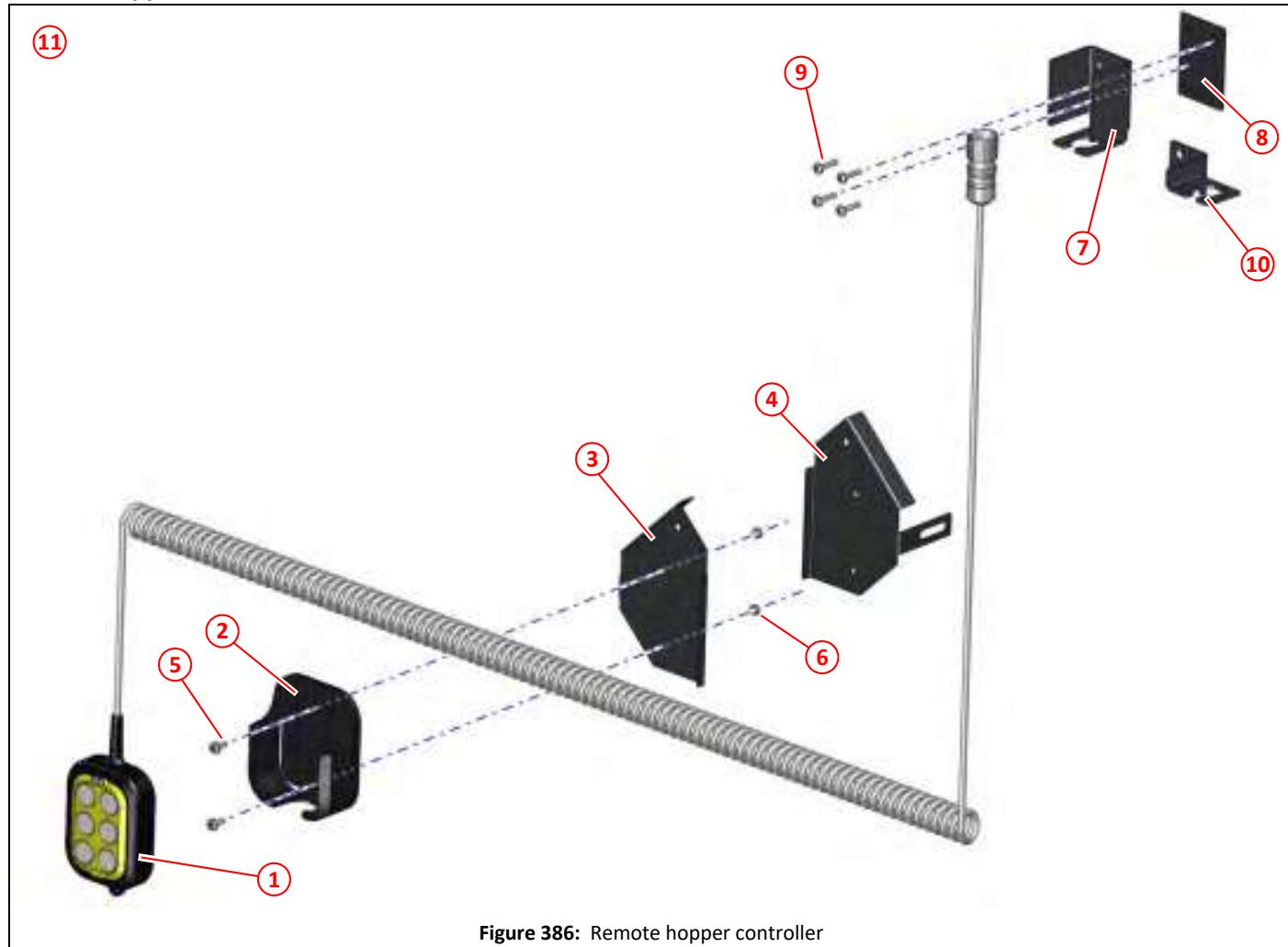


Figure 386: Remote hopper controller

| Item | Part No  | Qty | Description                                     |
|------|----------|-----|---|
| ①    | 043688   | 1   | Hopper controller V3 PXL                        |
| ②    | 043691   | 1   | Holster, hopper controller V3 PXL               |
| ③    | 037898 * | 1   | Mounting bracket, hopper controller, left hand  |
| ④    | 037928 * | 1   | Mounting bracket, hopper controller, right hand |
| ⑤    | 100103   | 2   | Pan head POZIDRIV screw M5 x 12                 |
| ⑥    | 000155   | 2   | Nyloc nut M5                                    |
| ⑦    | 037299 * | 1   | Bracket, hopper controller wiring               |
| ⑧    | 038058 * | 1   | Backplate, hopper controller wiring bracket     |
| ⑨    | 000402   | 4   | Pan head POZIDRIV screw M5 x 20                 |
| ⑩    | 037408 * | 1   | Bracket, hopper controller wiring               |
| ⑪    | 037047   | 1   | Loom, hopper controller                         |

\*. These are examples of brackets used to mount the remote controller holster and cable to the chassis or other areas of the cab, if needing to order, then please contact Scarab Parts Department and have your sweeper serial number and type of chassis it is built on available, to ensure correct parts selection.

*Due to the many chassis and variants available it is not practical to list all of the fittings for attaching items to the chassis, please use appropriate fittings and if in any doubt contact Scarab Sweepers for advice.*

**Other components, cab components**

| Part No  | Description                      |  |
|----------|----------------------------------|--|
| 042049 * | Beacon switch, DAF               |  |
| 038543 * | Beacon switch, Renault           |  |
| 039672   | Cable, M12 to USB                |  |
| 037048   | Sounder                          |  |
| 040717   | Camera monitor                   |  |
| 041534   | Camera splitter                  |  |
| 011768   | Relay, 10/20 Amp, Beacon(s), 12v |  |
| 014718   | Relay, 10/20 Amp, Beacon(s), 24v |  |
| 011768   | Relay, 10/20 Amp, Ignition, 12v  |  |
| 014718   | Relay, 10/20 Amp, Ignition, 24v  |  |

\*. Switches for other chassis manufacturers please contact Scarab Parts Department.

*For looms and other electrical items in the cab please refer to the "Electrical" section starting on page .*

**Cab**



# Labels and decals

| Description              | Page |
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| Decals and badges .....  | 432  |

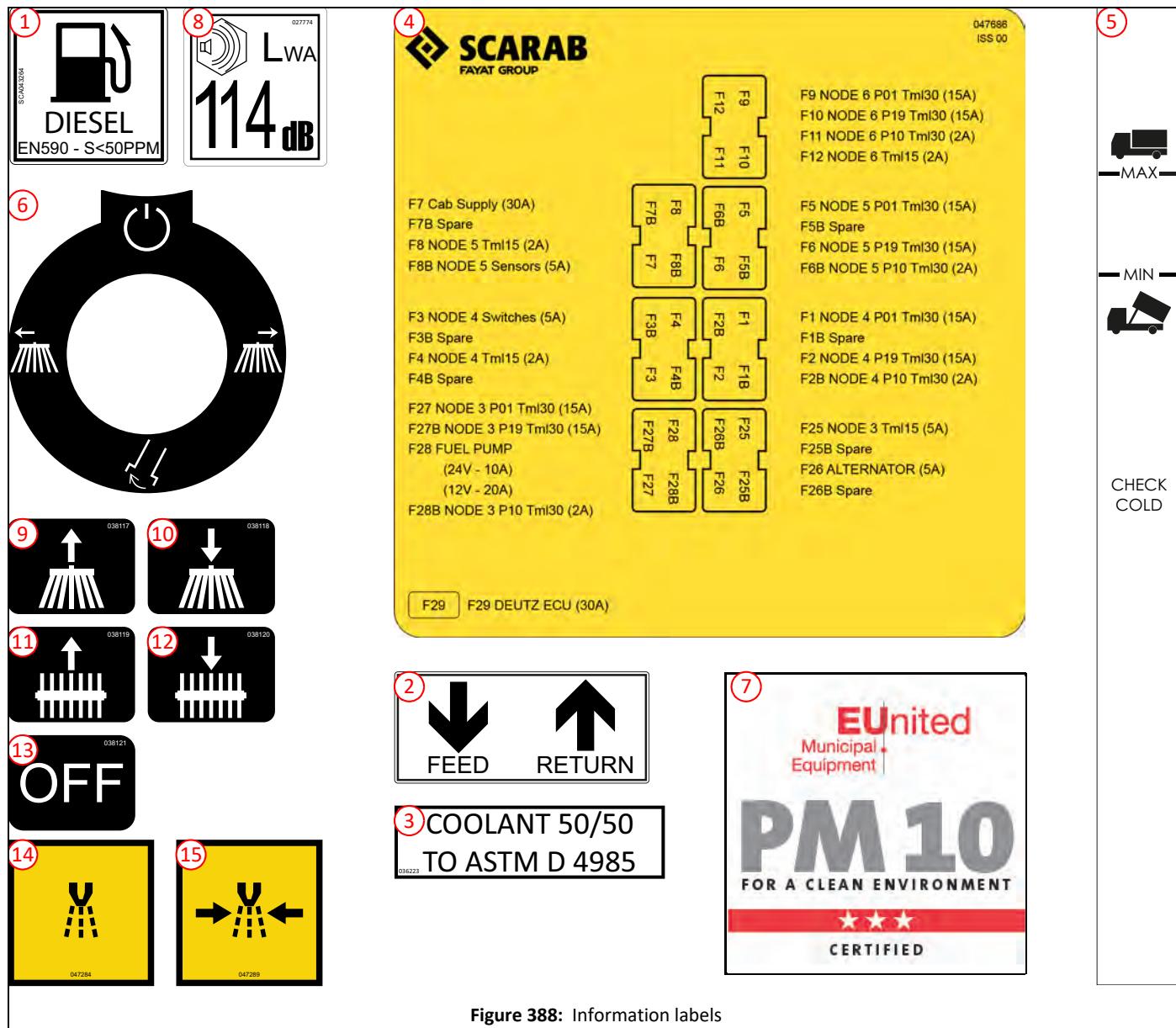
## Warning labels



Figure 387: Warning labels

| Item | Part No | Description                                       | File |
|------|---------|---|------|
| ①    | 043265  | Label - Warning - Debris                          |      |
| ②    | 043266  | Label - Warning - Hot surface                     |      |
| ③    | 043267  | Label - Warning - Read the manual                 |      |
| ④    | 043268  | Label - Warning - Electrical                      |      |
| ⑤    | 043269  | Label - Warning - Use hopper prop                 |      |
| ⑥    | 043270  | Label - Warning - Rotating parts                  |      |
| ⑦    | 043271  | Label - Warning - Rotating parts and trap hazard  |      |
| ⑧    | 043272  | Label - Warning - Rotating parts, read the manual |      |
| ⑨    | 021061  | Label - Warning - Fan Inspection                  |      |
| ⑩    | 043693  | Label - Warning                                   |      |
| ⑪    | 045491  | Label - Warning - Cyclists stay back              |      |

**i** Please note that not all labels will necessarily be on your sweeper. There may also be labels that are specific to your region/country that are not shown in this parts book. Please contact Scarab Parts if you require assistance.

**Information labels**

**Figure 388: Information labels**

| Item | Part No | Description  |
|------|---------|--|
| ①    | 043264  | Label - Information - Diesel   |
| ②    | 043866  | Label - Information - Fuel feed/return   |
| ③    | 036223  | Label - Information - Coolant grade  |
| ④    | 043458  | Label - Information - Fuses cabinet  |
| ⑤    | 048213  | Label - Information - Hydraulic oil level  |
| ⑥    | 039545  | Label - Information - Auxiliary control panel joystick                             |
| ⑦    | 039869  | Label - Information - PM10   |
| ⑧    | 027774  | Label - Information - Sound level 114dB  |
| ⑨    | 038117  | Label - Information - Side brush up - turn on reduced pressure                     |
| ⑩    | 038118  | Label - Information - Side brush down - turn on increased pressure -               |
| ⑪    | 038119  | Label - Information - Central brush (wide sweep) up - turn on reduced pressure     |
| ⑫    | 038120  | Label - Information - Central brush (wide sweep) down - turn on increased pressure |
| ⑬    | 038121  | Label - Information - Brush pressures OFF  |
| ⑭    | 047284  | Label - Air purge low pressure   |
| ⑮    | 047289  | Label - Air purge high pressure  |

## Labels and decals



## Decals and badges



Figure 389: Decals and badges

| Item | Part No | Description              | File |
|------|---------|--------------------------|------|
| ①    | 042983  | Scarab Fayat logo, black |      |
| ②    | 042983  | Scarab Fayat logo, white |      |
| ③    | 045762  | Fayat logo, domed badge  |      |

# Multi-lingual glossary

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| English                | Français                     | Italiano                           |
|------------------------|------------------------------|------------------------------------|
| <b>A</b>               |                              |                                    |
| Access                 | Accès                        | Accesso                            |
| Accessories            | Accessoires                  | Accessori                          |
| Accelerator            | Accélérateur                 | Acceleratore                       |
| Actuator               | Servomoteur                  | Attuatore                          |
| Adapter (adapt)        | Adaptateur                   | Adattatore                         |
| Adapter Flange         | Adaptateur à bride           | Flangia adattatore                 |
| Adapter Plate          | Adaptateur, à plaque         | Piastra adattatore                 |
| Adapter, Straight      | Adaptateur, droit            | Adattatore in linea                |
| Adjuster               | Régulateur                   | Dispositivo di regolazione         |
| Adjuster Kit           | Régulateur, kit              | Corredo dispositivo di regolazione |
| Adjuster Valve         | Vanne de régulation          | Valvola dispositivo di regolazione |
| Adjustable             | Ajustable                    | Regolabile                         |
| Aerial                 | Antenne                      | Antenna                            |
| Air                    | Air                          | Aria                               |
| Air Cleaner            | Filtre à air                 | Filtro aria                        |
| Air Conditioner        | Climatiseur                  | Condizionatore aria                |
| Air Cylinder           | Cylindre d'air               | Cilindro aria                      |
| Air Filter             | Filtre à air                 | Filtro aria                        |
| Air Manifold           | Collecteur d'air             | Collettore aria                    |
| Air Mass Meter         | Compteur d'air-massique      | Flussometro di massa               |
| Air Feed               | Injecteur d'air              | Alimentazione aria                 |
| Air Chute              | Goulotte pneumatique         | Lobo aria-aria                     |
| Air Outlet             | Sortie d'air                 | Bocca di uscita aria               |
| Air Muffler            | Amortisseur d'air            | Silenziatore aria                  |
| Air Pressure Regulator | Régulateur de pression d'air | Regolatore pressione aria          |
| Air Ram                | Vérin pneumatique            | Pistone aria                       |
| Air Valve              | Soupape d'air                | Valvola di sfiato                  |
| Air Vent Pipe          | Tuyau de refoulement d'air   | Tubo di sfiato                     |
| Alternator             | Alternateur                  | Alternatore                        |
| Alternator Interface   | Alternateur, interface       | Interfaccia alternatore            |
| Aluminium (Alum.)      | Aluminium (alum.)            | Alluminio (Allum.)                 |
| Anchor                 | Ancre, dispositif d'ancrage  | Ancora                             |
| Angle                  | Angle                        | Angolo                             |
| Antiluce Fastener      | Fixation « Antiluce »        | Dispositivo di fissaggio Antiluce  |
| Amendment (Amdt.)      | Modification (modif.)        | Rettifica (rett.)                  |
| Amplifier              | Amplificateur                | Amplificatore                      |
| Arrangement            | Disposition                  | Disposizione                       |
| Assembly (Assy)        | Ensemble                     | Gruppo                             |
| Auto Blanking          | Fermeture automatique        | Autochiusura                       |
| Automatic              | Automatique                  | Automatico                         |

| English                        | Français                     | Italiano             |
|--------------------------------|------------------------------|----------------------|
| <b>Auxiliary</b>               | Auxiliaire                   | Ausiliario           |
| <b>Axle</b>                    | Essieu                       | Asse                 |
| <b>Axle Beam</b>               | Essieu, fusée d'             | Asta asse            |
| <b>Axle Bolt</b>               | Essieu, boulon d'            | Bullone asse         |
| <b>Axle Breather</b>           | Essieu, reniflard d'         | Sfiatatoio asse      |
| <b>Axle Carrier &amp; Tube</b> | Essieu, porte-essieu et tube | Supporto e tubo asse |
| <b>Axle Front</b>              | Essieu, avant                | Frontale asse        |
| <b>Axle Rear</b>               | Essieu, arrière              | Retro asse           |
| <b>Axle Washer</b>             | Essieu, rondelle d'          | Rondella asse        |

**B**

|                                |                       |                                |
|--------------------------------|-----------------------|--------------------------------|
| <b>Back Plate</b>              | Socle                 | Piastra di supporto            |
| <b>Bag</b>                     | Sac                   | Borsa                          |
| <b>Ball</b>                    | Bille                 | Sfera                          |
| <b>Ball End</b>                | Rotule                | Estremità arrotondata          |
| <b>Ball Joint</b>              | Joint sphérique       | Giunto sferico                 |
| <b>Ball Valve</b>              | Vanne à biseau        | Valvola a sfera                |
| <b>Bar</b>                     | Barre                 | Barra                          |
| <b>Basin</b>                   | Cuvette               | Bacino                         |
| <b>Battery</b>                 | Batterie              | Batteria                       |
| <b>Battery Housing</b>         | Batterie, logement de | Sede batteria                  |
| <b>Battery Terminals</b>       | Batterie, bornes      | Terminali batteria             |
| <b>Battery Lead</b>            | Batterie, câble       | Cavo batteria                  |
| <b>Battery Tray</b>            | Batterie, plateau     | Vassoio portabatteria          |
| <b>Beacon</b>                  | Gyrophare             | Segnale luminoso               |
| <b>Beacon Bar</b>              | Barre de gyrophare    | Barra segnale luminoso         |
| <b>Beam</b>                    | Phare                 | Fascio                         |
| <b>Bearing</b>                 | Roulement, palier     | Cuscinetto                     |
| <b>Bell Housing</b>            | Logement évasé        | Sede campanello                |
| <b>Bellows</b>                 | Soufflet              | Soffietto                      |
| <b>Belt</b>                    | Courroie              | Cinghia                        |
| <b>Black</b>                   | Noir                  | Nero                           |
| <b>Blanking</b>                | Obturation            | Tappaggio                      |
| <b>Beeper</b>                  | Signal                | Emettitore di segnali acustici |
| <b>Blind Rivet</b>             | Rivet aveugle         | Ribattino con spina inserita   |
| <b>Block</b>                   | Bloc                  | Blocco                         |
| <b>Blue</b>                    | Bleu                  | Blu                            |
| <b>Board</b>                   | Carton                | Piastra                        |
| <b>Body</b>                    | Corps                 | Corpo                          |
| <b>Bolt</b>                    | Boulon                | Bullone                        |
| <b>hex hd (hexagonal head)</b> | Boulon à tête 6 pans  | testa esagonale                |
| <b>skt hd (socket head)</b>    | Boulon à tête creuse  | brugola                        |

| English                           | Français                    | Italiano           |
|-----------------------------------|-----------------------------|--------------------|
| <b>csk hd (counter-sunk head)</b> | Boulon à tête fraisée       | svasato            |
| <b>Boom</b>                       | Flèche                      | Braccio            |
| <b>Boost</b>                      | Suralimenter                | Spinta             |
| <b>Bore</b>                       | Alésage                     | Camera cilindrica  |
| <b>Boss</b>                       | Moyeu, bossage              | Mozzo              |
| <b>Bottom</b>                     | Fond                        | Fondo              |
| <b>Bottle</b>                     | Bouteille                   | Flacone            |
| <b>Box</b>                        | Boîte                       | Scatola            |
| <b>Brace</b>                      | Tirant                      | Braccio            |
| <b>Bracket (Brkt)</b>             | Support                     | Staffa             |
| <b>Brake</b>                      | Frein                       | Freno              |
| <b>Brass Wing Nut</b>             | Ecrou à oreilles, en laiton | Galletto di ottone |
| <b>Breather</b>                   | Reniflard                   | Sfiatatoio         |
| <b>Broom</b>                      | Balai                       | Scopa              |
| <b>Brown</b>                      | Marron                      | Marrone            |
| <b>Brush</b>                      | Brosse                      | Spazzola           |
| <b>Base</b>                       | Base                        | Base               |
| <b>Buffer</b>                     | Tampon                      | Respingente        |
| <b>Build</b>                      | Construire, modèle          | Costruzione        |
| <b>Bulb</b>                       | Ampoule                     | Lampadina          |
| <b>Bulkhead</b>                   | Cloison                     | Paratia            |
| <b>Bumper</b>                     | Pare-chocs                  | Paraurti           |
| <b>Bump Stop</b>                  | Butoir                      | Respingente        |
| <b>Bungee Cord</b>                | Corde « Bungee »            | Cavo elastico      |
| <b>Bush</b>                       | Manchon / Bague             | Boccolla           |
| <b>Buzzer</b>                     | Vibreur                     | Cicalino           |
| <b>Button</b>                     | Bouton                      | Pulsante           |

## C

|                  |                |                |
|------------------|----------------|----------------|
| <b>Cable</b>     | Câble          | Cavo           |
| <b>Caliper</b>   | Calibre        | Pinza          |
| <b>Cam Shaft</b> | Arbre à cames  | Albero a camme |
| <b>Camera</b>    | Caméra         | Camera         |
| <b>Canopy</b>    | Auvent / Capot | Tettuccio      |
| <b>Cap</b>       | Capuchon       | Cappuccio      |
| <b>Capping</b>   | Chapeau        | Cornice        |
| <b>Carabiner</b> | Carabine       | Carabiner      |
| <b>Carrier</b>   | Porte, support | Portante       |
| <b>Case</b>      | Boîtier        | Scatola        |
| <b>Casing</b>    | Boîtier        | Involucro      |
| <b>Catalogue</b> | Catalogue      | Catalogo       |
| <b>Cab</b>       | Cabine         | Cabina         |

| English                  | Français                 | Italiano              |
|--------------------------|--------------------------|-----------------------|
| Catch                    | Cliquet, disp. d'arrêt   | Fermo                 |
| Caution                  | Notice « attention »     | Attenzione            |
| Centre                   | Centre                   | Centro                |
| Chain                    | Chaîne                   | Catena                |
| Chassis                  | Châssis                  | Chassis               |
| Check                    | Contrôle                 | Controllo             |
| Check Valve              | Soupape d'arrêt / Clapet | Valvola di ritegno    |
| Chute                    | Goulotte                 | Scivolo               |
| Circlip                  | Circlip                  | Anello elastico       |
| Circuit                  | Circuit                  | Circuito              |
| Clamp                    | Collier                  | Morsetto              |
| Cleaner                  | Nettoyage, dispositif de | Detergente            |
| Clevis                   | Chape                    | Maniglione            |
| Clip                     | Pince                    | Clip                  |
| Clutch                   | Embrayage                | Frizione              |
| Coach                    | Carrosserie              | Carrozzeria           |
| Coil                     | Bobine                   | Bobina                |
| Collar                   | Bague de serrage         | Piattello             |
| Complete                 | Complet (complète)       | Completo              |
| Components               | Composants               | Componenti            |
| Compressor               | Compresseur              | Compressore           |
| Cone                     | Cône                     | Cono                  |
| Connector                | Connecteur               | Connettore            |
| Connecting               | Connectant               | Connessione in corso  |
| Con Rod (Connecting Rod) | Bielle                   | Biella                |
| Continued (Cont.)        | Suite                    | Continuazione (cont.) |
| Control (Cntrl)          | Contrôle                 | Controllo (Cntrl)     |
| Controller               | Contrôleur               | Unità di controllo    |
| Conventional             | Conventionnel            | Convenzionale         |
| Conversion (Conv)        | Conversion               | Conversione (Conv)    |
| Cooler                   | Refroidisseur            | Refrigerante          |
| Cooling                  | Refroidissement          | Raffreddamento        |
| Copper                   | Cuivre                   | Rame                  |
| Core                     | Ame                      | Nucleo                |
| Cotter                   | Goupille                 | Chiavetta trasversale |
| Coupling                 | Raccord / Accouplement   | Accoppiamento         |
| Cover                    | Couvercle                | Coperchio             |
| Cowling                  | Capotage                 | Cappottatura          |
| Crank-case               | Carter-moteur            | Basamento             |
| Cranked                  | Contre-coudé             | Gambo piegato         |
| Cross Member             | Traverse                 | Traversa              |
| Crown Wheel              | Couronne d'entraînement  | Corona dentata        |

| English        | Français                 | Italiano                             |
|----------------|--------------------------|--------------------------------------|
| Curb           | Bord, bordure            | Bordo                                |
| Cylinder       | Cylindre                 | Cilindro                             |
| <b>D</b>       |                          |                                      |
| Damper         | Amortisseur              | Smorzatore                           |
| Deflector      | Déflecteur               | Deflettore                           |
| Description    | Description              | Descrizione                          |
| Details        | Informations             | Dettagli                             |
| Detergent      | Detergent                | Detergente                           |
| Diagram        | Diagramme                | Diagramma                            |
| Dial           | Cadran                   | Quadrante                            |
| Diaphragm      | Diaphragme               | Diaframma                            |
| Diode          | Diode                    | Diodo                                |
| Dipped Beam    | Feu de croisement        | Anabbagliante                        |
| Dipstick       | Jauge                    | Asta di livello                      |
| Dipstick guide | Jauge, guide de          | Guida asta di livello                |
| Dipstick tube  | Jauge, tube de           | Tubo asta di livello                 |
| Directional    | Directionnel             | Direzionale                          |
| Dirt           | Impureté                 | Sporco                               |
| Disc / Disk    | Disque                   | Disco                                |
| Display        | Écran d'affichage        | Visualizzatore                       |
| Distributor    | Distributeur             | Distributore                         |
| Diverter       | Diviseur                 | Diverter                             |
| Door           | Porte                    | Sportello                            |
| Double         | Double                   | Doppio                               |
| Dowel          | Cheville                 | Perno di riferimento                 |
| Down           | Bas                      | Giù                                  |
| Dowty Seal     | Joint « Dowty »          | Chiusura ermetica Dowty              |
| Drag Link Tube | Tube de tige directrice  | Tirante longitudinale comando sterzo |
| Drain Plug     | Bouchon de vidange       | Tappo di scarico                     |
| Drive          | Entraînement             | Trasmissione                         |
| Drive Core     | Entraînement, âme d'     | Nucleo trasmissione                  |
| Drive Coupling | Entraînement, raccord d' | Accoppiamento trasmissione           |
| Drive Dog      | Entraînement, crabot d'  | Innesco trasmissione                 |
| Drive Flange   | Entraînement, bride d'   | Flangia trasmissione                 |
| Drive Motor    | Entraînement, moteur d'  | Motore principale                    |
| Drive Pump     | Entraînement, pompe d'   | Pompa trasmissione                   |
| Drive Shaft    | Entraînement, arbre d'   | Albero comando                       |
| Drive Tube     | Entraînement, tube d'    | Tubo trasmissione                    |
| Dual Sweep     | Double balayage          | doppia spazzata                      |
| Dump Valve     | Soupape de décharge      | Valvola di scarico rapido            |
| Dust           | Poussière                | Polvere                              |

| English                                | Français                       | Italiano                   |
|--|--------------------------------|----------------------------|
| <b>E</b>                               |                                |                            |
| <b>Eccentric</b>                       | Excentrique                    | Eccentrico                 |
| <b>Elbow</b>                           | Coude                          | Gomito                     |
| <b>Electric</b>                        | Electrique                     | Elettrico                  |
| <b>Electrical</b>                      | Electrique                     | Elettrico                  |
| <b>Element</b>                         | Elément                        | Elemento                   |
| <b>Enclosure</b>                       | Enceinte                       | Alloggiamento              |
| <b>End</b>                             | Extrémité                      | Estremità                  |
| <b>End Plate</b>                       | Extrémité, plaque d'           | Piastra estremità          |
| <b>End Cap</b>                         | Extrémité, chapeau d'          | Cappuccio estremità        |
| <b>Engine</b>                          | Moteur                         | Motore                     |
| <b>Exchange</b>                        | Echange                        | Scambio                    |
| <b>Exhaust</b>                         | Echappement                    | Scarico                    |
| <b>Exhaust Gas Recirculation (EGR)</b> | Recyclage de gaz d'échappement | Ricircolo gas di scarico   |
| <b>Expansion</b>                       | Dilatation                     | Espansione                 |
| <b>Extended</b>                        | Dilaté                         | Esteso                     |
| <b>Extension</b>                       | Extension                      | Estensione                 |
| <b>Extinguisher</b>                    | Extincteur                     | Estintore                  |
| <b>F</b>                               |                                |                            |
| <b>Fan</b>                             | Ventilateur                    | Ventola                    |
| <b>Fastener</b>                        | Fixation                       | Dispositivo di fissaggio   |
| <b>Feed</b>                            | Alimentation                   | Alimentazione              |
| <b>Female</b>                          | Femelle                        | Femmina                    |
| <b>Filler</b>                          | Remplisseur                    | Bocchettone di riempimento |
| <b>Filter</b>                          | Filtre                         | Filtro                     |
| <b>Finisher</b>                        | Finisseur                      | Finitore                   |
| <b>Fire</b>                            | Feu                            | Combustione                |
| <b>First</b>                           | Premier                        | Primo                      |
| <b>Fishtail</b>                        | Queue de poisson / Cône        | Coda di pesce              |
| <b>Fit</b>                             | Emboîter / Monter              | Montaggio                  |
| <b>Fitting</b>                         | Raccord                        | Montaggio                  |
| <b>Fixing</b>                          | Fixation                       | Rettifica                  |
| <b>Flange</b>                          | Bride                          | Flangia                    |
| <b>Flap</b>                            | Volet                          | Alettone                   |
| <b>Flash</b>                           | Flash                          | Flash                      |
| <b>Flexible (Flexi)</b>                | Flexible                       | Flessibile (flexi)         |
| <b>Floor</b>                           | Plancher                       | Pavimento                  |
| <b>Floorplate</b>                      | Plaque de sol                  | Base pavimento             |
| <b>Flow</b>                            | Débit                          | Flusso                     |
| <b>Fluid</b>                           | Fluide                         | Fluido                     |

| English         | Français   | Italiano     |
|-----------------|------------|--------------|
| <b>Flywheel</b> | Volant     | Volano       |
| <b>Foam</b>     | Mousse     | Schiuma      |
| <b>Fog</b>      | Brouillard | Nebbia       |
| <b>Foot</b>     | Pied       | Piede        |
| <b>Forward</b>  | Avant      | Avanti       |
| <b>Frame</b>    | Bâti       | Telaio       |
| <b>Front</b>    | Avant      | Anteriore    |
| <b>Fuel</b>     | Carburant  | Combustibile |
| <b>Function</b> | Fonction   | Funzione     |
| <b>Fuse</b>     | Fusible    | Fusibile     |

## G

|                              |                                 |                               |
|------------------------------|---------------------------------|-------------------------------|
| <b>Gain</b>                  | Gain                            | Guadagno                      |
| <b>Galvanised</b>            | Galvanisé                       | Zincato                       |
| <b>Gantry</b>                | Portique                        | Cavalletto                    |
| <b>Gas</b>                   | Gaz                             | Gas                           |
| <b>Gas Strut</b>             | Jambe à gaz                     | Puntone gas                   |
| <b>Gasket</b>                | Garniture d'étanchéité          | Guarnizione                   |
| <b>Gauge</b>                 | Manomètre                       | Calibro                       |
| <b>Gauze</b>                 | Gaze                            | Garza                         |
| <b>Gear</b>                  | Engrenage                       | Ingranaggio                   |
| <b>Geared</b>                | A engrenages                    | Ingranato                     |
| <b>Gearbox</b>               | Boîte de vitesses               | Scatola del cambio            |
| <b>General</b>               | Général(e)                      | Generale                      |
| <b>Glass</b>                 | Verre                           | Vetro                         |
| <b>Glow Plug</b>             | Bougie de préchauffage          | Spina a incandescenza         |
| <b>Gobbler (Nozzle Tilt)</b> | Gobbler (Inclinaison d' Embout) | Gobbler (Ugello Inclinazione) |
| <b>Grab</b>                  | Grappin                         | 1. Estrattore a pinza (n)     |
| <b>Grease</b>                | Graisse                         | Grasso                        |
| <b>Greaser</b>               | Graisseur                       | Ingrassatore                  |
| <b>Green</b>                 | vert                            | Verde                         |
| <b>Grey</b>                  | gris                            | Grigio                        |
| <b>Grill</b>                 | gril                            | Griglia                       |
| <b>Grip</b>                  | manche                          | 1. Presa (n)                  |
| <b>Grub Screw</b>            | vis sans tête                   | Vite di riferimento           |
| <b>Grommet</b>               | virole                          | Anello di tenuta              |
| <b>Guard</b>                 | Carter de protection            | Riparo                        |
| <b>Guide</b>                 | Guide                           | Guida                         |

## H

|                    |                             |                                |
|--------------------|-----------------------------|--------------------------------|
| <b>Hand</b>        | Côté                        | Mano                           |
| <b>Hand Primer</b> | Pompe à main, dispositif de | Pompetta di adescamento a mano |

| English                   | Français                                | Italiano                        |
|---------------------------|---|---------------------------------|
| <b>Hand Wash</b>          | Lavage à main                           | Lavaggio a mano                 |
| <b>Handbrake</b>          | Frein à main                            | Freno a mano                    |
| <b>Handle</b>             | Poignée                                 | Maniglia                        |
| <b>Hanger</b>             | Suspension                              | Supporto pendente               |
| <b>Harness</b>            | Harnais                                 | Cablaggio                       |
| <b>Head</b>               | Tête                                    | Testa                           |
| <b>Headlamp</b>           | Phare                                   | Faro                            |
| <b>Heat</b>               | Chaleur                                 | Calore                          |
| <b>Heatshield</b>         | Bouclier thermique                      | Scudo termico                   |
| <b>Heater</b>             | Chauffage                               | Riscaldatore                    |
| <b>High Pressure</b>      | Haute pression                          | Alta pressione                  |
| <b>Hi Tip</b>             | Bennage en hauteur                      | Punta alta                      |
| <b>Hinge</b>              | Charnière                               | Cerniera                        |
| <b>Hinged</b>             | Charnière, à                            | Incernierato                    |
| <b>Holder</b>             | Porte-outil                             | Staffa di supporto              |
| <b>Hooks</b>              | Crochets                                | Ganci                           |
| <b>Hopper</b>             | Trémie                                  | Serbatoio con scarico sul fondo |
| <b>Horn</b>               | Avertisseur sonore                      | Avvisatore acustico             |
| <b>Hose</b>               | Tuyau flexible                          | Tubo flessibile                 |
| <b>Hose Tail</b>          | Tuyau flexible, bout de                 | Raccordo tubo flessibile        |
| <b>Hot</b>                | Chaud                                   | Caldo                           |
| <b>Hour Meter</b>         | Compteur horaire                        | Contatore                       |
| <b>Housing</b>            | Logement                                | Alloggiamento                   |
| <b>Hub</b>                | Manchon                                 | Mozzo                           |
| <b>Hydraulic</b>          | Hydraulique                             | Idraulico                       |
| <b>Hydrant</b>            | Bouche d'incendie                       | Idrante                         |
| <b>Hydrant Filler</b>     | Bouche d'incendie, disp. de remplissage | Filtro idrante                  |
| <b>Hydrant Hose</b>       | Bouche d'incendie, tuyau souple         | Tubo idrante                    |
| <b>Hydrostatic</b>        | Hydrostatique                           | Idrostatico                     |
| <b>I</b>                  |   |                                 |
| <b>Identification</b>     | Identification                          | Identificazione                 |
| <b>Idle</b>               | Inactif / Ralenti                       | Inattivo                        |
| <b>Ignition (Ign)</b>     | Contact                                 | Accensione (Acc)                |
| <b>Illuminated</b>        | Eclairé                                 | Illuminato                      |
| <b>Illustrated</b>        | Illustré                                | Illustrato                      |
| <b>Illustration</b>       | Illustration                            | Illustrazione                   |
| <b>Impellor</b>           | Rotor / Turbine                         | Girante                         |
| <b>Inclusive</b>          | Compris                                 | Inclusivo                       |
| <b>Information (Info)</b> | Informations                            | Informazioni (Info)             |
| <b>In</b>                 | Entré                                   | Dentro                          |
| <b>Inlet</b>              | Entrée                                  | Ammisione                       |

# Multi-lingual glossary



| English        | Français                    | Italiano                 |
|----------------|-----------------------------|--------------------------|
| Inlet Cone     | Entrée, cône d'             | Cono di ammissione       |
| Inlet Pipe     | Entrée, tuyau d'            | Tubo di ammissione       |
| Injection Pump | Pompe d'injection           | Pompa d'iniezione        |
| Injector       | Injecteur                   | Iniettore                |
| Injector Pipe  | Tuyau d'injection           | Tubo iniettore           |
| Input          | Entrée                      | Ingresso                 |
| Inseal Strip   | Bandé d'étanchéité          | Guarnizione sigillante   |
| Insert         | Insert                      | Inserto                  |
| Insertion      | Insertion                   | Inserimento              |
| Installation   | Installation                | Installazione            |
| Instrument     | Instrument                  | Strumento                |
| Insulator      | Isolateur                   | Isolante                 |
| Inter Cooler   | Refroidisseur intermédiaire | Refrigeratore intermedio |
| Interior       | Intérieur                   | Interno                  |
| Interim        | Intérimaire                 | Interim                  |
| Internal       | Interne                     | Interno                  |
| Item           | Article                     | Articolo                 |

## J

|              |                 |                   |
|--------------|-----------------|-------------------|
| Jet          | Jet             | Getto             |
| Joint        | Joint           | Giunto            |
| Joystick     | Joystick        | Joystick          |
| Jubilee Clip | Pince crocodile | Fermaglio Jubilee |
| Junction     | Jonction        | Incrocio          |

## K

|            |                    |                          |
|------------|--------------------|--------------------------|
| Key        | Clé                | Chiave                   |
| Key Switch | Interrupteur à clé | Interruttore a chiavetta |
| Kerb       | Bordure            | Bordo (as in pavement)   |
| King Pin   | Axe-pivot          | Perno di sterzaggio      |
| King Post  | Poinçon de faîte   | Puntone di sostegno      |
| Kit        | Kit                | Corredo                  |
| Knob       | Bouton             | Manopola                 |

## L

|           |                  |                   |
|-----------|------------------|-------------------|
| Label     | Etiquette        |                   |
| Lamp      | Lampe            | Lampada etichetta |
| Work Lamp | Lampe de travail | Lampada da lavoro |
| Head Lamp | Projecteur       | Faro              |
| Side Lamp | Lampe latérale   | Luce di posizione |
| Lance     | Lance            | Lancia            |

| English                       | Français                  | Italiano                         |
|-------------------------------|---------------------------|----------------------------------|
| Lap Joint                     | Joint à recouvrement      | Giunto a sovrapposizione         |
| Large                         | Grand                     | Grande                           |
| Latch                         | Verrou                    | Serratura                        |
| Lead                          | Fil                       | Cavo                             |
| L.E.D. (Light Emitting Diode) | Diode électroluminescente | LED (Diodo a emissione luminosa) |
| Leash                         | Laisse                    | Maglia                           |
| Left                          | Gauche                    | Sinistra                         |
| Left Hand Drive (LHD)         | Conduite à gauche         | Guida a sinistra (LHD)           |
| Leg                           | Jambe                     | Gamba                            |
| Length                        | Longueur                  | Lunghezza                        |
| Lens                          | Objectif                  | Lente                            |
| Level                         | Niveau                    | Livello                          |
| Lever                         | Levier                    | Leva                             |
| Lid                           | Couvercle                 | Coperchio                        |
| Lift                          | Ascenseur                 | Sollevare                        |
| Lifting                       | Levage                    | Sollevamento                     |
| Light                         | Feux                      | Luce                             |
| Side Light                    | Feux latéraux             | Luce di posizione                |
| Head Light                    | Phare                     | Faro                             |
| Rear Light                    | Feu arrière               | Fanale di coda                   |
| Brake Light                   | Feux stop                 | Luce freno                       |
| Interior Light                | Eclairage intérieur       | Luce abitacolo                   |
| Fog Light                     | Feu antibrouillard        | Faro antinebbia                  |
| Linch Pin                     | Axe d'essieu              | Acciarino                        |
| Lining                        | Revêtement                | Rivestimento interno             |
| Link                          | Maillon                   | Articolazione                    |
| Linkage                       | Tringlerie                | Sistema di leve                  |
| Litre                         | Litre                     | Litro                            |
| List                          | Liste                     | Lista                            |
| Load                          | Charge                    | Carico                           |
| Located                       | Situé                     | Posizionato                      |
| Lock                          | Verrou                    | Fermo                            |
| Locknut                       | Ecrou de blocage          | Controdado                       |
| Locker                        | Armoire                   | Armadietto                       |
| Locking                       | Verrouillage              | Serraggio                        |
| Long                          | Long                      | Lungo                            |
| Loom                          | Métier                    | Cablaggio                        |
| Loop                          | Boucle                    | Circuito elettrico ad anello     |
| Low Pressure                  | Basse pression            | Bassa pressione                  |
| Lower                         | Baisser                   | Inferiore                        |
| Lubricant                     | Lubrifiant                | Lubrificante                     |
| Lubrication                   | Lubrification             | Lubrificazione                   |

| English              | Français               | Italiano                |
|----------------------|------------------------|-------------------------|
| <b>M</b>             |                        |                         |
| Machine              | Machine                | Macchina                |
| Magnet               | Aimant                 | Magnete                 |
| Magnetic             | Magnétique             | Magnetico               |
| Main                 | Principal(e)           | Principale              |
| Male                 | Mâle                   | Maschio                 |
| Management           | Gestion                | Gestione                |
| Manifold             | Collecteur             | Collettore              |
| Manual               | Manuel                 | Manuale                 |
| Manufactured         | Fabriqué               | Fabbricato              |
| Marker Lamp          | Lampe signal           | Lampada di segnalazione |
| Master               | Maître                 | Principale              |
| Master Cylinder      | Maître-cylindre        | Cilindro principale     |
| Maximum (Max)        | Maximum (maxi)         | Massimo (max.)          |
| Mesh                 | Tamis                  | Maglia                  |
| Metal                | Métal                  | Metallo                 |
| Meter                | Mètre                  | Calibro                 |
| Micro Switch         | Micro-contact          | Microinterruttore       |
| Minimum (Min)        | Minimum (mini)         | Minimo (min.)           |
| Mirror               | Miroir                 | Specchio                |
| Miscellaneous        | Divers                 | Miscellanea             |
| Modified             | Modifié                | Modificato              |
| Module               | Module                 | Modulo                  |
| Monitor              | Moniteur               | Monitor                 |
| Motor                | Moteur                 | Motore                  |
| Mount                | Monture                | Montaggio               |
| Mounted              | Monté                  | Montato                 |
| Mounting             | Châssis / Support      | Montaggio               |
| Mud Flaps            | Bavettes de garde-boue | Paraspruzzi             |
| Mud Guard            | Garde-boue             | Parafango               |
| Muffler              | Amortisseur            | Marmitta                |
| Multi Function       | Multifonctions         | Multifunzionale         |
| <b>N</b>             |                        |                         |
| N/A (Not Applicable) | S/O (sans objet)       | N/D (Non disponibile)   |
| Narrow               | Etroit                 | Stretto                 |
| Near side            | Côté trottoir          | Lato guida              |
| Negative             | Négatif                | Negativo                |
| Neutral              | Neutre                 | Neutro                  |
| New                  | Nouveau (nouvelle)     | Nuovo                   |
| Nipple               | Manchon                | Raccordo filettato      |

| English          | Français                       | Italiano               |
|------------------|--------------------------------|------------------------|
| No               | Non                            | N. (Numero)            |
| Non Return       | Anti-retour                    | Non ritorno            |
| Normal           | Normal                         | Normale                |
| Note             | Note                           | Nota                   |
| Nozzle           | Embout / Buse                  | Ugello                 |
| Number           | Numéro                         | Numero                 |
| Numerical        | Numérique                      | Numerico               |
| Nut              | Ecrou                          | Dado                   |
| Nyloc Nut        | Ecrou « Nyloc »                | Dado Nyloc             |
| Hex Nut          | Ecrou hexagonal                | Dado a testa esagonale |
| Plain Nut        | Ecrou normal                   | Dado liscio            |
| Self Locking Nut | Ecrou autobloquant             | Dado autobloccante     |
| Thin Nut         | Ecrou mince                    | Dado sottile           |
| Nylon Tube       | Tube de nylon / Nylon, tube de | Tubo di nylon          |

## O

|           |                    |                            |
|-----------|--------------------|----------------------------|
| Obsolete  | Périmé             | Obsoleto                   |
| Off       | Arrêt              | 1. Spento 2. Inattivo      |
| Off Side  | Côté route         | Lato passeggero            |
| Oil       | Huile              | Olio                       |
| Olive     | Olive              | Oliva                      |
| On        | Marche             | 1. Acceso 2. Attivo        |
| Open      | Ouvrir             | Aprire                     |
| Opened    | Ouvert(e)          | Aperto                     |
| Opening   | Ouverture          | Apertura                   |
| Operating | Fonctionnement, de | Operativo                  |
| Option    | Option             | Opzione                    |
| Optional  | Optionnel(le)      | Opzionale                  |
| Orange    | Orange             | Arancione                  |
| Original  | Original           | Originale                  |
| O Ring    | Joint torique      | Anello di tenuta toroidale |
| Out       | Sorti(e)           | 1. Fuori 2. Esterno        |
| Outer     | Extérieur(e)       | Esterno                    |
| Outlet    | Sortie             | Sbocco                     |
| Output    | Production         | Uscita                     |
| Overhead  | Surélevé           | in testa                   |
| Overload  | Surcharge          | Sovraccarico               |

## P

|        |                        |             |
|--------|------------------------|-------------|
| Packer | Garniture d'étanchéité | Imballatore |
| Panel  | Panneau                | Pannello    |
| Part   | Pièce                  | Ricambio    |

| English                  | Français                   | Italiano                     |
|--------------------------|----------------------------|------------------------------|
| Pedal                    | Pédale                     | Pedale                       |
| Pick-up                  | Prendre / en lever         | Ripresa                      |
| Pilot (pressure)         | Pilote                     | Pilota                       |
| Pin                      | Cheville                   | Perno                        |
| Pinion                   | Pignon                     | Pignone                      |
| Pink                     | Rose                       | Rosa                         |
| Pipe                     | Tuyau                      | Tubo                         |
| Piping                   | Tuyauterie                 | Tubazione                    |
| Piston                   | Piston                     | Pistone                      |
| Pivot                    | Pivot                      | Perno di testa               |
| Plastic                  | Plastique, matière         | Plastica                     |
| Plate                    | Plaque                     | Piastra                      |
| Plinth                   | Plinthe                    | Base                         |
| Plug                     | Bouchon / Prise electrique | Spina                        |
| Point                    | Point                      | Punto                        |
| Poppet Valve             | Soupape / Clapet           | Valvola supporto verticale   |
| Ports                    | Orifices                   | Porte                        |
| Position                 | Position                   | Posizione                    |
| Positioned               | Positionné(e)              | Posizionato                  |
| Post                     | Montant                    | Montante                     |
| Potentiometer            | Potentiomètre              | Potenziometro                |
| Power                    | Puissance                  | Potenza                      |
| Pneumatic (See Also Air) | Pneumatique                | Pneumatico (vedi anche Aria) |
| Pressure                 | Pression                   | Pressione                    |
| Primer                   | Amorce / Apprét            | Innesco                      |
| Production               | Production                 | Produzione                   |
| Prop                     | Support                    | Puntello                     |
| Propshaft                | Arbre de transmission      | Albero puntello              |
| Pull                     | Tirer                      | Tirare                       |
| Pulley                   | Poulie                     | Puleggia                     |
| Pulsation                | Pulsion                    | Pulsazione                   |
| Pulse                    | Impulsion                  | Polso                        |
| Pump                     | Pompe                      | Pompa                        |
| Purple                   | Violet                     | Porpora                      |
| <b>Q</b>                 |                            |                              |
| Quick Release            | Rapide, raccord            | Disinnesco rapido            |
| <b>R</b>                 |                            |                              |
| Radiator (Rad)           | Radiateur                  | Radiatore (rad)              |
| Raise                    | Soulever                   | Sollevarre                   |
| Raised                   | Soulevé(e)                 | Sollevato                    |

| English                | Français                 | Italiano             |
|------------------------|--------------------------|----------------------|
| Ram                    | Vérin                    | Pistone              |
| Ratio                  | Rapport                  | Rapporto             |
| Rear                   | Arrière                  | Retro                |
| Red                    | Rouge                    | Rosso                |
| Reducer                | Réducteur                | Riduttore            |
| Reducing               | Réduction, de            | Riduzione            |
| Reduction              | Roue / Enrouleur         | Riduzione            |
| Reel                   | Bobine                   | Bobina               |
| Refer                  | Voir                     | Riferimento          |
| Refill                 | Remplir                  | Rabbocco             |
| Regulator              | Régulateur               | Regolatore           |
| Related                | Relatif                  | Correlato            |
| Relay                  | Relais                   | Relè                 |
| Release                | Dégagement               | Disinnesco           |
| Relief Valve           | Soupape de sûreté        | Valvola di sfogo     |
| Remote                 | A distance / Distance, à | Remoto               |
| Repair                 | Réparation               | Riparazione          |
| Replacement            | Remplacement             | Sostituzione         |
| Resister               | Résistance               | Resistore            |
| Refill                 | Remplir                  | Rabbocco             |
| Regulator              | Régulateur               | Regolatore           |
| Related                | Relatif                  | Correlato            |
| Relay                  | Relais                   | Relè                 |
| Release                | Dégagement               | Disinnesco           |
| Relief Valve           | Soupape de sûreté        | Valvola di sfogo     |
| Remote                 | A distance / Distance, à | Remoto               |
| Repair                 | Réparation               | Riparazione          |
| Replacement            | Remplacement             | Sostituzione         |
| Resister               | Résistance               | Resistore            |
| Restrictor             | Restriction              | Limitatore           |
| Retainer               | Retenue, dispositif de   | Fermo                |
| Retaining              | Retenue, de              | Sostegno             |
| Return                 | Retour                   | Ritorno              |
| Reverse                | Inverse                  | Retromarcia          |
| Reversing              | Recul                    | Inversione di marcia |
| Right                  | Droite                   | Destra               |
| Right Hand Drive (RHD) | Conduite à droite        | Guida a destra       |
| Rim                    | Jante                    | Bordo                |
| Ring                   | Bague                    | Anello               |
| Road                   | Route                    | Strada               |
| Rod                    | Tige                     | Asta                 |
| Rolling                | Roulant, de roulement    | Rotolante            |

| English  | Français   | Italiano  |
|----------|------------|-----------|
| Rotary   | Rotatif    | Rotante   |
| Rotate   | Tourner    | Ruotare   |
| Rotating | Tournant   | Rotante   |
| Rotation | Rotation   | Rotazione |
| Rubber   | Caoutchouc | Gomma     |

## S

|                            |                           |                            |
|----------------------------|---------------------------|----------------------------|
| Safety                     | Sécurité                  | Sicurezza                  |
| Scraper                    | Racleur                   | Raschietto                 |
| Screen                     | Ecran                     | Schermo                    |
| Screw                      | Vis                       | Scheggia                   |
| Hex hd (hexagonal head)    | Vis à tête 6 pans         | Testa esagonale            |
| skt hd (socket head)       | Vis à tête creuse         | Brugola                    |
| csk hd (counter-sunk head) | Vis à tête fraisée        | Svasata                    |
| Seal                       | Garniture d'étanchéité    | Chiusura ermetica          |
| Sealant                    | Etanchéifiant             | Materiale di tenuta        |
| Sealing                    | Etanchéité, d'            | Sigillante                 |
| Seat                       | Siège                     | Sedile                     |
| Securing                   | Fixation, de              | Fissaggio                  |
| Selector Shaft             | Levier de commande        | Albero selettore           |
| Self Tapping               | Auto-taraudeur            | Autofilettante             |
| Sender                     | Expéditeur / Transmetteur |                            |
| Sensor                     | Capteur                   | Sensore                    |
| Separation                 | Séparation                | Separazione                |
| Serial                     | Série, de                 | Seriale                    |
| Service Exchange (S/EX)    | Echange standard          | Scambio di servizio        |
| Set screw                  | Vis de calage             | Vite di fermo              |
| Shaft                      | Arbre                     | Albero                     |
| Shells                     | Calandres                 | Gusci                      |
| Shield                     | Ecran                     | Scudo                      |
| Shim                       | Cale                      | Zeppa                      |
| Shock Absorber             | Amortisseur               | Ammortizzatore             |
| Shoe                       | Patin                     | Scarpa                     |
| Short                      | Court(e)                  | Ganascia                   |
| Shovel                     | Pelle                     | Pala                       |
| Side Access Door           | Porte d'accès latéral     | Sportello accesso laterale |
| Sight                      | Vue                       | Mirino                     |
| Silencer                   | Silencieux                | Silenziatore               |
| Silicon                    | Silicone                  | Silicone                   |
| Single                     | Simple                    | Singolo                    |
| Skirt                      | Jupe                      | Bordatura                  |
| Slate                      | Ardoise                   | Ardesia                    |

| English     | Français                  | Italiano           |
|-------------|---------------------------|--------------------|
| Sleeve      | Gaine                     | Manicotto          |
| Slew        | Pivoter                   | Ruotare            |
| Slewing     | Orientation               | Rotazione          |
| Sliding     | Coulissant                | Slittamento        |
| Slotted     | Fente, A                  | Sfinestrato        |
| Small       | Petit(e)                  | Piccolo            |
| Socket      | Prise                     | Presa              |
| Solenoid    | Solénoïde / Noyau         | Solenoide          |
| Spacer      | Pièce d'espacement        | distanziatore      |
| Spare       | Rechange, pièce de        | ricambio           |
| Speakers    | Haut-parleurs             | altoparlanti       |
| Special     | Spécial(e)                | speciale           |
| Speed       | Vitesse                   | velocità           |
| Spherical   | Sphérique                 | sferico            |
| Spigot      | Goujon / Tube de jonction | zipolo             |
| Spindle     | Broche                    | mandrino           |
| Splined     | Cannelé                   | linguetta          |
| Split Pin   | Goupille fendue           | coppiglia          |
| Splitter    | Répartiteur               | diviso             |
| Spray       | Pulvérisateur             | spray              |
| Spring      | Ressort                   | molla              |
| Stabiliser  | Stabilisateur             | stabilizzatore     |
| Stabilising | Stabilisation             | stabilizzante      |
| Stack       | Pile                      | pila               |
| Standard    | Standard                  | standard           |
| Standpipe   | Colonne montante          | colonna in aumento |
| Starter     | Démarreur                 | starter            |
| Steel       | Acier                     | acciaio            |
| Steering    | Direction                 | lo sterzo          |
| Stem        | Tige                      | Guarnizione        |
| Stiffener   | Raidisseur                | rinforzo           |
| Stop        | Arrêt                     | fermare            |
| Storage     | Rangement                 | conservazione      |
| Stowage     | Arrimage                  | stivaggio          |
| Straight    | Droit(e)                  | dritto             |
| Strap       | Attache                   | cinghia            |
| Strip       | Bande                     | Cintura            |
| Strut       | Jambe                     | il supporto        |
| Stub        | Souche                    | mozzicone          |
| Stud        | Goujon fileté             | il perno           |
| Studded     | Barrettes, A              | costellato         |
| Studding    | Colombage                 | coltellaccio       |

| English                  | Français                     | Italiano                    |
|--------------------------|------------------------------|-----------------------------|
| <b>Sub Frame</b>         | Faux-châssis                 | sottotelaio                 |
| <b>Suction Fan</b>       | Turbine d'aspiration         | turbina di aspirazione      |
| <b>Suction Nozzle</b>    | Buse d'aspiration            | ugello di aspirazione       |
| <b>Sump</b>              | Carter                       | i carter                    |
| <b>Supply</b>            | Fourniture                   | fornitura                   |
| <b>Support</b>           | Support                      | supporto                    |
| <b>Suppression</b>       | Suppression                  | repressione                 |
| <b>Suspension</b>        | Suspension                   | sospensione                 |
| <b>Sweep</b>             | Balayage                     | spazzare                    |
| <b>Sweeping</b>          | Balayant, de balayage        | Formatura a sagoma          |
| <b>Swing</b>             | Balancement                  | Oscillazione                |
| <b>Switch / Switches</b> | Interrupteur / Interrupteurs | Interruttore / Interruttori |
| <b>Swivel</b>            | Pivotant                     | Parte girevole              |
| <b>System</b>            | Système                      | Sistema                     |

## T

|                           |                       |                       |
|---------------------------|-----------------------|-----------------------|
| <b>Tab Washer</b>         | Rondelle à languettes | Rondella di sicurezza |
| <b>Tachograph</b>         | Tachygraphe           | Tachigrafo            |
| <b>Tachometer</b>         | Tachymètre            | Tacometro             |
| <b>Tandem</b>             | Tandem                | Tandem                |
| <b>Tank</b>               | Réservoir             | Serbatoio             |
| <b>Tapered</b>            | Conique               | Conico                |
| <b>Taper Lock</b>         | Verrou conique        | Serratura conica      |
| <b>Tee Key</b>            | Clé à bêquille        | Chiave a T            |
| <b>Temperature (Temp)</b> | Température (temp.)   | Temperatura (Temp)    |
| <b>Template</b>           | Gabarit               | Sagoma                |
| <b>Tensioner</b>          | Tendeur               | Tensiometro           |
| <b>Terminal</b>           | Borne                 | Terminale             |
| <b>Test</b>               | Test                  | Test                  |
| <b>Thermostat</b>         | Thermostat            | Termostato            |
| <b>Thick</b>              | Epais                 | Spesso                |
| <b>Thimble</b>            | Dé                    | Bussola               |
| <b>Thin</b>               | Mince                 | Sottile               |
| <b>Throttle</b>           | Accélérateur          | Farfalla              |
| <b>Thrust</b>             | Poussée               | Spinta                |
| <b>Tie Rod</b>            | Tirant                | Tirante               |
| <b>Tilt</b>               | Inclinaison           | Inclinazione          |
| <b>Tilting</b>            | Inclinable            | Inclinazione          |
| <b>Timer</b>              | Minuterie             | Timer                 |
| <b>Timing</b>             | Minutage              | Temporizzazione       |
| <b>Toggle</b>             | Bascule               | Ginocchiera           |
| <b>Tool</b>               | Util                  | Attrezzo              |

| English                     | Français                         | Italiano                           |
|-----------------------------|----------------------------------|------------------------------------|
| <b>Toolbox</b>              | Boîte à outils                   | Cassetta attrezzi                  |
| <b>Toothed</b>              | Dentelé(e)                       | Dentato                            |
| <b>Top</b>                  | Dessus                           | Cima                               |
| <b>Tow</b>                  | Remorquer                        | Rimorchio                          |
| <b>Tow Ball</b>             | Boule de remorquage              | Sfera rimorchio                    |
| <b>Tow Bar</b>              | Barre de remorquage              | Barra rimorchio                    |
| <b>Tow Point</b>            | Point de remorquage              | Punto di rimorchio                 |
| <b>Track Rod</b>            | Barre d'accouplement             | Barra di accoppiamento             |
| <b>Trailer</b>              | Remorque                         | Rimorchio                          |
| <b>Transfer Gearbox</b>     | Boîte de transfert intermédiaire | Scatola del cambio a trasferimento |
| <b>Transmission</b>         | Transmission                     | Trasmissione                       |
| <b>Travel</b>               | Course                           | Corsa                              |
| <b>Trunking</b>             | Jonction                         | Circuito di collegamento           |
| <b>Trunnion</b>             | Tourillon                        | Perno di articolazione             |
| <b>Tube</b>                 | Tube                             | Tubo                               |
| <b>Tubing</b>               | Tubage                           | Tubazione                          |
| <b>Turbocharger (Turbo)</b> | Turbocompresseur                 | Turbocompressore                   |
| <b>Twin</b>                 | Jumelé                           | Gemello                            |
| <b>Type</b>                 | Type                             | Tipo                               |
| <b>Typical</b>              | Typique                          | Tipico                             |
| <b>Tyre</b>                 | Pneu                             | Pneumatico                         |

## U

|                              |                              |                   |
|------------------------------|------------------------------|-------------------|
| <b>Uncompressed</b>          | Non comprimé                 | Decompresso       |
| <b>Underside</b>             | Dessous                      | Disotto           |
| <b>Universal Joint (U/J)</b> | Joint universel / Croisillon | Giunto universale |
| <b>Union</b>                 | Raccord                      | Unione            |
| <b>Unit</b>                  | Unité                        | Unità             |
| <b>Un-Loader</b>             | Déchargeur                   | Scaricatore       |
| <b>Up</b>                    | Dessus                       | Su                |
| <b>Update</b>                | Mise à jour                  | Aggiornamento     |
| <b>Usage</b>                 | Utilisation                  | Utilizzo          |

## V

|                |                |           |
|----------------|----------------|-----------|
| <b>Valve</b>   | Vanne / Souape | Valvola   |
| <b>Variant</b> | Variante       | Variante  |
| <b>Vehicle</b> | Véhicule       | Veicolo   |
| <b>Voltage</b> | Tension        | Voltaggio |

## W

|                    |                     |                        |
|--------------------|---------------------|------------------------|
| <b>Wander Hose</b> | Flexible aspirateur | Tubo flessibile mobile |
|--------------------|---------------------|------------------------|

| English  | Français  | Italiano   |
|--|---|--|
| <b>Warning</b>   | Avertissement   | Avvertenza   |
| <b>Washer</b>  | Rondelle  | Rondella   |
| <b>Water</b>   | Eau   | Acqua  |
| <b>Wear</b>  | Usure   | Usura  |
| <b>Weed Ripper</b>   | Désherbage, dispositif de   | Sarchiatore  |
| <b>Welded</b>  | Soudé   | Saldato  |
| <b>Wheel</b>   | Roue  | Ruota  |
| <b>White</b>   | Blanc(he)   | Bianco   |
| <b>Wide Sweep</b>  | Balayage large  | Curvatura larga  |
| <b>Windscreen</b>  | Pare-brise  | Parabrezza   |
| <b>Wiper</b>   | Essuie-glace  | Tergicristallo   |
| <b>Wires</b>   | Câblage   | Fili   |
| <b>Wiring –</b><br><b>black,</b><br><b>blue,</b><br><b>brown,</b><br><b>green,</b><br><b>grey,</b><br><b>orange,</b><br><b>pink,</b><br><b>purple,</b><br><b>red,</b><br><b>white</b><br><b>yellow</b> | Câblage –<br>noir,<br>bleu,<br>marron,<br>vert,<br>gris,<br>orange,<br>rose,<br>violet,<br>rouge,<br>blanc<br>jaune | Cablaggio<br>Nero,<br>Blu,<br>Marrone,<br>Verde,<br>Grigio,<br>Arancione,<br>Rosa,<br>Porpora,<br>Rosso,<br>Bianco<br>Giallo |
| <b>Work Light</b>  | Lampe de travail  |  |
| <b>X</b>   |   |  |
| <b>Xenon</b>   | Xénon   | Xenon  |
| <b>Y</b>   |   |  |
| <b>Yellow</b>  | Jaune   | Giallo   |

| English                       | Español                            | Svenska               |
|-------------------------------|------------------------------------|-----------------------|
| <b>A</b>                      |                                    |                       |
| <b>Access</b>                 | Acceso                             | Tillgång              |
| <b>Accessories</b>            | Accesorios                         | Tillbehör             |
| <b>Accelerator</b>            | Acelerador                         | Gaspedal              |
| <b>Actuator</b>               | Accionador, servomotor             | Aktiverare            |
| <b>Adaptor (adapt)</b>        | Adaptador (Adapt.)                 | Övergång              |
| <b>Adapter Flange</b>         | Brida del adaptador                | Övergångsfläns        |
| <b>Adaptor Plate</b>          | Disco del adaptador                | Övergångsplatta       |
| <b>Adaptor, Straight</b>      | Tramo recto del adaptador          | Rak övergång          |
| <b>Adjuster</b>               | Regulador                          | Justering             |
| <b>Adjuster Kit</b>           | Juego regulador                    | Justeringssatts       |
| <b>Adjuster Valve</b>         | Válvula del regulador              | Ventiljustering       |
| <b>Adjustable</b>             | Ajustable                          | Justerbar             |
| <b>Aerial</b>                 | Antena                             | Antenn                |
| <b>Air</b>                    | Aire                               | Luft                  |
| <b>Air Cleaner</b>            | Purificador de aire                | Luftrenare            |
| <b>Air Conditioner</b>        | Aire acondicionado                 | Luftkonditionering    |
| <b>Air Cylinder</b>           | Cilindro de aire                   | Luftcylinder          |
| <b>Air Filter</b>             | Filtro de aire                     | Luftfilter            |
| <b>Air Manifold</b>           | Distribuidor de aire               | Luftfördelare         |
| <b>Air Mass Meter</b>         | Medidor de masa de aire            | Luftmätare            |
| <b>Air Feed</b>               | Inyector de aire                   | Luftförsörjning       |
| <b>Air Air Chute</b>          | Conducto neumático                 | Dränering             |
| <b>Air Outlet</b>             | Salida de aire                     | Överskottsluft        |
| <b>Air Muffler</b>            | Silenciador de aire                | Luftljuddämpare       |
| <b>Air Pressure Regulator</b> | Regulador de presión del aire      | Luftregulator         |
| <b>Air Ram</b>                | Aire a presión                     | Luftkov               |
| <b>Air Valve</b>              | Válvula de aire                    | Luftventil            |
| <b>Air Vent Pipe</b>          | Tubería del sistema de ventilación | Luftventilsrör        |
| <b>Alternator</b>             | Alternador                         | Generator             |
| <b>Alternator Interface</b>   | Acoplamiento del alternador        | Generatorfäste        |
| <b>Aluminium (Alum)</b>       | Aluminio (Alum.)                   | Aluminium             |
| <b>Anchor</b>                 | Anclaje                            | Ankare                |
| <b>Angle</b>                  | Ángulo                             | Vinkel                |
| <b>Antiluce Fastener</b>      | Elemento de sujeción "Anti-luce"   | Låsbeslag(sidodörr)   |
| <b>Amendment (Amdt.)</b>      | Corrección (Correc.)               | Rättelse/förbättring  |
| <b>Amplifier</b>              | Amplificador                       | Elektrisk förstärkare |
| <b>Arrangement</b>            | Disposición                        | Arrangemang           |
| <b>Ashtray</b>                | Cenicero                           | Askkopp               |
| <b>Assembly (Assy)</b>        | Conjunto (Conj.)                   | Sätta ihop            |

| English             | Español                | Svenska              |
|---------------------|------------------------|----------------------|
| Auto Blanking       | Borrado automático     | Automatisk stängning |
| Automatic           | Automático             | Automatisk           |
| Auxiliary           | Auxiliar               | Extra                |
| Axle                | Eje                    | Axel                 |
| Axle Beam           | Viga del eje           |                      |
| Axle Bolt           | Perno del eje          | Axelbult             |
| Axle Breather       | Respiradero del eje    |                      |
| Axle Carrier & Tube | Tubo y soporte del eje |                      |
| Axle Front          | Frontal del eje        | Framaxel             |
| Axle Rear           | Trasera del eje        | Bakaxel              |
| Axle Washer         | Arandela del eje       | Axelbricka           |

## B

|                   |                           |                      |
|-------------------|---------------------------|----------------------|
| Back Plate        | Contraplato               | Bakstycke            |
| Bag               | Bolsa                     | Säck                 |
| Ball              | Bola                      | Kula                 |
| Ball End          | Lado esférico             |                      |
| Ball Joint        | Rótula                    |                      |
| Ball Valve        | Válvula de bola           | Kulventil            |
| Bar               | Barra                     | Ramp                 |
| Basin             | Vasija                    | Skål                 |
| Battery           | Batería                   | Batteri              |
| Battery Housing   | Alojamiento de la batería | Batterikåpa          |
| Battery Terminals | Bornes de la batería      | Batteriterminal      |
| Battery Lead      | Cable de la batería       | Batteribly           |
| Battery Tray      | Bandeja de la batería     | Batteri platta       |
| Beacon            | Faro                      | Varningsljus         |
| Beacon Bar        | Barra del faro            | Takramp varningsljus |
| Beam              | Haz                       | Strålkastare         |
| Bearing           | Cojinete                  | Lager                |
| Bell Housing      | Carcasa del embrague      | Svänghjulskåpa       |
| Bellows           | Fuelle                    | Bälge                |
| Belt              | Correa                    | Remm                 |
| Black             | Negro                     | Svart                |
| Blanking          | Borrado                   | Stängning            |
| Beeper            | Emisor de tonos           | Backvanare           |
| Blind Rivet       | Remache ciego             | Popnit               |
| Block             | Bloque                    | Stänga/sätta igen    |
| Blue              | Azul                      | Blå                  |
| Board             | Tablero                   | Skiva                |
| Body              | Cuerpo                    | Kropp                |
| Bolt              | Perno                     | Bult                 |

| English                           | Español                         | Svenska             |
|-----------------------------------|---------------------------------|---------------------|
| <b>hex hd (hexagonal head)</b>    | cab. hexag. (cabeza hexagonal)  | Bult (sexkanthuvud) |
| <b>skt hd (socket head)</b>       | cab. hueca (cabeza hueca)       | Bult försänkt huvud |
| <b>csk hd (counter-sunk head)</b> | cab. avell. (cabeza avellanada) |                     |
| <b>Boom</b>                       | Brazo                           | Bom                 |
| <b>Boost</b>                      | Empujar                         | Högeffekt           |
| <b>Bore</b>                       | Calibre                         | Borra               |
| <b>Boss</b>                       | Refuerzo                        | Knopp               |
| <b>Bottom</b>                     | Inferior                        | Nertill             |
| <b>Bottle</b>                     | Botella                         | Flaska              |
| <b>Box</b>                        | Cuadro                          | Låda                |
| <b>Brace</b>                      | Abrazadera                      | Band                |
| <b>Bracket (Brkt)</b>             | Soporte (Sop.)                  | Konsoll             |
| <b>Brake</b>                      | Freno                           | Broms               |
| <b>Brass Wing Nut</b>             | Tuerca de mariposa de latón     | Mässingsvingmutter  |
| <b>Breather</b>                   | Respiradero                     | Luftare             |
| <b>Broom</b>                      | Escobilla                       | Kvast               |
| <b>Brown</b>                      | Marrón                          | Brun                |
| <b>Brush</b>                      | Escobilla                       | Borste              |
| <b>Base</b>                       | Base                            | Bas                 |
| <b>Buffer</b>                     | Amortiguador                    | Dämppare            |
| <b>Build</b>                      | Construir                       | Bygga               |
| <b>Bulb</b>                       | Bombilla                        | Lampa               |
| <b>Bulkhead</b>                   | Mampara                         | Skott (i tank)      |
| <b>Bumper</b>                     | Parachoques                     | Kofångare           |
| <b>Bump Stop</b>                  | Tope                            | Underköringsskydd   |
| <b>Bungee Cord</b>                | Cuerda elástica                 |                     |
| <b>Bush</b>                       | Casquillo                       | Bussning            |
| <b>Buzzer</b>                     | Zumbador                        | Summer              |
| <b>Button</b>                     | Botón                           | Knapp               |

## C

|                  |                |            |
|------------------|----------------|------------|
| <b>Cab</b>       | Cabina         | Hytt       |
| <b>Cable</b>     | Cable          | Wire       |
| <b>Caliper</b>   | Calibrador     |            |
| <b>Cam Shaft</b> | Árbol de levas | Kamaxel    |
| <b>Camera</b>    | Cámara         | Kamera     |
| <b>Canopy</b>    | Cúpula         | Kanape     |
| <b>Cap</b>       | Tapa           | Kåpa       |
| <b>Capping</b>   | Cubierta       |            |
| <b>Carabiner</b> | Mosquetón      | Karbidhake |
| <b>Carrier</b>   | Soporte        | Bärare     |
| <b>Case</b>      | Caja           | Fall       |

| English                  | Español              | Svenska        |
|--------------------------|----------------------|----------------|
| Casing                   | Carcasa              | Hölje          |
| Catalogue                | Catálogo             | Katalog        |
| Catch                    | Fiador               | Fånga          |
| Caution                  | Precaución           | Varning        |
| Centre                   | Centro               | Mitten         |
| Chain                    | Cadena               | Kedja          |
| Chassis                  | Chasis               | Chassie        |
| Check                    | Control              | Kontrollera    |
| Check Valve              | Válvula de retención | Kontrollventil |
| Chute                    | Conducto             | Dränering      |
| Circlip                  | Resorte circular     | Buntband       |
| Circuit                  | Circuito             | Strömkrets     |
| Clamp                    | Grapa                | Klämma         |
| Cleaner                  | Limpiador            | Rengörare      |
| Clevis                   | Horquilla            |                |
| Clip                     | Pinza                | Klämma         |
| Clutch                   | Embrague             | Koppling       |
| Coach                    | Carrocería           | Kaross         |
| Coil                     | Bobina               | Spole          |
| Collar                   | Casquillo            | Krage          |
| Complete                 | Completo             | Slutföra       |
| Components               | Componentes          | Komponent      |
| Compressor               | Compresor            | Kompressor     |
| Cone                     | Cono                 | Konisk         |
| Connector                | Conector             | Kontaktor      |
| Connecting               | Conexión en curso    | Ansluta        |
| Connection               | Conexión             | Anslutning     |
| Con Rod (Connecting Rod) | Biela (Biela)        |                |
| Continued (Cont.)        | Continuación (Cont.) | Fortsatt       |
| Control (Cntrl)          | Control (Cont.)      | Kontroll       |
| Controller               | Controlador          | Kontrollant    |
| Conventional             | Convencional         | Vanlig         |
| Conversion (Conv)        | Conversión (Conv.)   | Omställning    |
| Cooler                   | Refrigerador         | Kylare         |
| Cooling                  | Refrigeración        | Kylning        |
| Copper                   | Cobre                | Koppar         |
| Core                     | Núcleo               | Stomme         |
| Cotter                   | Chaveta              | Sprint/kil     |
| Coupling                 | Acoplamiento         | Koppling       |
| Cover                    | Cubierta             | Skydd          |
| Cowling                  | Capó                 |                |
| Crank-case               | Cárter               | Vevhus         |

| English               | Español                               | Svenska              |
|-----------------------|---------------------------------------|----------------------|
| <b>Cranked</b>        | Acodado                               | Krökt                |
| <b>Cross Member</b>   | Travesaño                             | Tvärlstag            |
| <b>Crown Wheel</b>    | Corona dentada                        | Kronhjul             |
| <b>Curb</b>           | Borde                                 | Kansten              |
| <b>Cylinder</b>       | Cilindro                              | Cylinder             |
| <b>D</b>              |                                       |                      |
| <b>Damper</b>         | Amortiguador                          | Dämpare              |
| <b>Deflector</b>      | Deflector                             | Riktare              |
| <b>Description</b>    | Descripción                           | Beskrivning          |
| <b>Details</b>        | Detalles                              | Detaljer             |
| <b>Detergent</b>      | Detergente                            | Rengöring            |
| <b>Diagram</b>        | Diagrama                              | Diagram              |
| <b>Dial</b>           | Cuadrante                             | Ring                 |
| <b>Diaphragm</b>      | Diafragma                             | Diafragma            |
| <b>Diode</b>          | Diodo                                 | Diod                 |
| <b>Dipped Beam</b>    | Luz de cruce                          | Halvljus             |
| <b>Dipstick</b>       | Varilla de nivel de aceite            | Olje/mätsticka       |
| <b>Dipstick guide</b> | Guía de la varilla de nivel de aceite | Markering oljesticka |
| <b>Dipstick tube</b>  | Tubo de la varilla de nivel de aceite | Rör oljesticka       |
| <b>Directional</b>    | Direccional                           | Riktningsvisare      |
| <b>Dirt</b>           | Suciedad                              | Smutts               |
| <b>Disc/Disk</b>      | Disco                                 | Lamell               |
| <b>Display</b>        | Pantalla                              | Skärm                |
| <b>Distributor</b>    | Distribuidor                          | Distributör          |
| <b>Diverter</b>       | Desviador de flujo                    | Omvändare            |
| <b>Door</b>           | Puerta                                | Dörr                 |
| <b>Double</b>         | Doble                                 | Dubbel               |
| <b>Dowel</b>          | Espiga                                | Plugg/tapp           |
| <b>Down</b>           | Abajo                                 | Ner                  |
| <b>Dowty Seal</b>     | Junta "Dowty"                         |                      |
| <b>Drag Link Tube</b> | Biela de arrastre                     |                      |
| <b>Drain Plug</b>     | Tapón de drenaje                      | Dräneringsplug       |
| <b>Drive</b>          | Transmisión                           | Köra                 |
| <b>Drive Core</b>     | Núcleo de la transmisión              | Drivaxel             |
| <b>Drive Coupling</b> | Acoplamiento de la transmisión        | Drivkoppling         |
| <b>Drive Dog</b>      | Retén de la transmisión               |                      |
| <b>Drive Flange</b>   | Brida de la transmisión               | Drivfläns            |
| <b>Drive Motor</b>    | Motor de la transmisión               | Drivmotor            |
| <b>Drive Pump</b>     | Bomba de la transmisión               | Drivpump             |
| <b>Drive Shaft</b>    | Eje de la transmisión                 | Drivaxel             |

| English           | Español                | Svenska          |
|-------------------|------------------------|------------------|
| <b>Drive Tube</b> | Tubo de la transmisión |                  |
| <b>Dual Sweep</b> | Doble barrido          | Dubbelsug        |
| <b>Dump Valve</b> | Válvula de descarga    | Övertrycksventil |
| <b>Dust</b>       | Polvo                  | Damm             |

## E

|  |  |                   |
|--|--|-------------------|
| <b>Earth, electrical (Ground)</b>      | Tierra                                     | Jord              |
| <b>Eccentric</b>                       | Excéntrico                                 | Eccentrix         |
| <b>Elbow</b>                           | Codo                                       | Vinkel            |
| <b>Electric</b>                        | Eléctrico                                  | Elektrisk         |
| <b>Electrical</b>                      | Eléctrico                                  | Elektriska        |
| <b>Element</b>                         | Elemento                                   | Beståndsdel       |
| <b>Enclosure</b>                       | Caja                                       | Omgivet           |
| <b>End</b>                             | Extremo                                    | Slut              |
| <b>End Plate</b>                       | Placa de tope                              | Skyddsplatta      |
| <b>End Cap</b>                         | Tapa de extremo                            | Skyddskåpa        |
| <b>Engine</b>                          | Motor                                      | Motor             |
| <b>Exchange</b>                        | Intercambio                                | Växla             |
| <b>Exhaust</b>                         | Escape                                     | Avgaser           |
| <b>Exhaust Gas Recirculation (EGR)</b> | Recirculación de los gases de escape (EGR) | Avgasventil (EGR) |
| <b>Expansion</b>                       | Expansión                                  | Expantion         |
| <b>Extended</b>                        | Extendido                                  | Förlängd          |
| <b>Extension</b>                       | Extensión                                  | Förlängning       |
| <b>Extinguisher</b>                    | Extintor                                   | Förlängare        |

## F

|                 |                   |                        |
|-----------------|-------------------|------------------------|
| <b>Fan</b>      | Ventilador        | Fläkt                  |
| <b>Fastener</b> | Sujeción          | Fäste                  |
| <b>Feed</b>     | Alimentación      | Försörjning            |
| <b>Female</b>   | Hembra            | Kvinna                 |
| <b>Filler</b>   | Embudo            | Filler                 |
| <b>Filter</b>   | Filtro            | Filter                 |
| <b>Finisher</b> | Unidad de acabado | Avslutare              |
| <b>Fire</b>     | Fuego             | Eld                    |
| <b>First</b>    | Primero           | Första                 |
| <b>Fishtail</b> | Cola de pez       | fiskstjärt             |
| <b>Fit</b>      | Acoplar           | Passa                  |
| <b>Fitting</b>  | Conector          | Montering/installation |
| <b>Fixing</b>   | Fijación          | Laga                   |
| <b>Flange</b>   | Brida             | Fläns                  |
| <b>Flap</b>     | Aleta             | Dörr / öppning         |

| English                      | Español                 | Svenska          |
|------------------------------|-------------------------|------------------|
| <b>Flash</b>                 | Centelleo               | Blixt            |
| <b>Flexible (Flexi)</b>      | Flexible (Flex.)        | Flexibel         |
| <b>Floor</b>                 | Piso                    | Golv             |
| <b>Floorplate</b>            | Placa de piso           | Golvplatta       |
| <b>Flow</b>                  | Flujo                   | Flöde            |
| <b>Fluid</b>                 | Líquido                 | Vätska           |
| <b>Flywheel</b>              | Volante                 | Stödhjul         |
| <b>Foam</b>                  | Espuma                  | Skumm            |
| <b>Fog</b>                   | Niebla                  | Dimma            |
| <b>Foot</b>                  | Pie                     | Fot              |
| <b>Forward</b>               | Directa                 | Framåt           |
| <b>Frame</b>                 | Bastidor                | Ram              |
| <b>Front</b>                 | Delantero               | Fram             |
| <b>Fuel</b>                  | Combustible             | Drivmedel        |
| <b>Function</b>              | Función                 | Funktion         |
| <b>Fuse</b>                  | Fusible                 | Säkning          |
| <b>G</b>                     |                         |                  |
| <b>Gain</b>                  | Ganancia                | Vinna            |
| <b>Galvanised</b>            | Galvanizado             | Galvaniserad     |
| <b>Gantry</b>                | Pórtico                 | Brygga/ställning |
| <b>Gas</b>                   | Gas                     | Gas              |
| <b>Gas Strut</b>             | Montante de gas         |                  |
| <b>Gasket</b>                | Junta                   | Packning         |
| <b>Gauge</b>                 | Indicador               | Tryckmätare      |
| <b>Gauze</b>                 | Tela metálica           | Flor(gasbinda)   |
| <b>Gear</b>                  | Engranaje               | Växel            |
| <b>Geared</b>                | Accionado por engranaje | Växlad           |
| <b>Gearbox</b>               | Caja de cambios         | Växellåda        |
| <b>General</b>               | General                 | I allmänhet      |
| <b>Glass</b>                 | Vidrio                  | Glas             |
| <b>Glow Plug</b>             | Bujía incandescente     | Glödstift        |
| <b>Gobbler (Nozzle Tilt)</b> | "Gobbler"               | Tilt (sugbox)    |
| <b>Grab</b>                  | Gancho                  | Fånga            |
| <b>Grease</b>                | Grasa                   | Smörja           |
| <b>Greaser</b>               | Engrasador              | Fett             |
| <b>Green</b>                 | Verde                   | Grön             |
| <b>Grey</b>                  | Gris                    | Grå              |
| <b>Grill</b>                 | Rejilla                 | Grill            |
| <b>Grip</b>                  | Mango                   | Grepp            |
| <b>Grub Screw</b>            | Tornillo de presión     | Avdragare        |
| <b>Grommet</b>               | Arandela                | genomföring      |
| <b>Guard</b>                 | Protección              | Skydd            |

| English        | Español                           | Svenska          |
|----------------|-----------------------------------|------------------|
| Guide          | Guía                              | Guide            |
| <b>H</b>       |                                   |                  |
| Handbrake      | Freno de mano                     | Handbroms        |
| Hand           | Manual, a mano                    | Hand             |
| Hand Primer    | Bomba de mano                     | Handcreme        |
| Hand Wash      | Lavado a mano                     | Handtvätt        |
| Handle         | Asa                               | Handtag/vred     |
| Hanger         | Soporte colgante                  | Hängare          |
| Harness        | Mazo de cables                    | Sele             |
| Head           | Cabeza                            | Huvud            |
| Headlamp       | Faro                              | Strålkastare     |
| Heat           | Calor                             | Värme            |
| Heatshield     | Pantalla térmica                  | Värmeplåt        |
| Heater         | Calentador                        | Värmare          |
| High Pressure  | Alta presión                      | Högtryck         |
| Hi Tip         | Punta alta                        | Högtippande      |
| Hinge          | Bisagra                           | Gångjärn         |
| Hinged         | Articulado                        | Gångjärns hängd  |
| Holder         | Portaherramientas                 | Hållare          |
| Hooks          | Ganchos                           | Krokar           |
| Hopper         | Tolva                             | Behållare        |
| Horn           | Claxon                            | Signalhorn       |
| Hose           | Tubo flexible                     | Slang            |
| Hose Tail      | Extremo de tubo flexible          | Slangände        |
| Hot            | Caliente                          | Varm             |
| Hour Meter     | Cronómetro                        | Timräknare       |
| Housing        | Carcasa                           | Kåpa/skydd       |
| Hub            | Cubo                              | Centrum          |
| Hydraulic      | Hidráulico                        | Hydraulisk       |
| Hydrant        | Boca de riego                     | Brandpost        |
| Hydrant Filler |                                   | Brandpost huvud  |
| Hydrant Hose   | Tubo flexible de la boca de riego | Brandposts slang |
| Hydrostatic    | Hidrostático                      | Hydrostatisk     |
| <b>I</b>       |                                   |                  |
| Identification | Identificación                    | Identifiering    |
| Idle           | Ralentí                           | Idealisk         |
| Ignition (Ign) | Encendido (Enc.)                  | Tändning         |
| Illuminated    | Encendido                         | Eliminerad       |
| Illustrated    | Ilustrado                         | Illustrerad      |
| Illustration   | Ilustración                       | Illustration     |

| English                   | Español                                 | Svenska            |
|---------------------------|---|--------------------|
| <b>Impeller</b>           | Propulsor                               | Impeller           |
| <b>Inclusive</b>          | Inclusivo                               | Inklusive          |
| <b>Information (Info)</b> | Información (Info.)                     | Information        |
| <b>In</b>                 | Dentro, entrada                         | In                 |
| <b>Inlet</b>              | Admisión                                | Insläpp            |
| <b>Inlet Cone</b>         | Núcleo de admisión                      | Insläppskona       |
| <b>Inlet Pipe</b>         | Tubo de admisión                        | Insläppsrör        |
| <b>Injection Pump</b>     | Bomba de inyección                      | Infektionspump     |
| <b>Injector</b>           | Inyector                                | Infektor           |
| <b>Injector Pipe</b>      | Tubo del inyector                       | Infektorrör        |
| <b>Input</b>              | Entrada                                 | Ingående           |
| <b>Inseal Strip</b>       | Banda de estanqueidad                   |                    |
| <b>Insert</b>             | Insertar                                | Lägga till         |
| <b>Insertion</b>          | Insertión                               | Insättande/tillägg |
| <b>Installation</b>       | Instalación                             | Installation       |
| <b>Instrument</b>         | Instrumento                             | Instrument         |
| <b>Insulator</b>          | Aislante                                | Isolerare          |
| <b>Inter Cooler</b>       | Refrigerador intermedio                 | Laddluftkylare     |
| <b>Interior</b>           | Interior                                | Inredning          |
| <b>Interim</b>            | Intermedio                              | Interim            |
| <b>Internal</b>           | Interno                                 | Invändig           |
| <b>Item</b>               | Elemento                                | Punkt/artikel      |
| <b>J</b>                  |   |                    |
| <b>Jet</b>                | Chorro, inyector                        | Jet                |
| <b>Joint</b>              | Articulación                            | Punkt              |
| <b>Joystick</b>           | Palanca de control                      | Joystick           |
| <b>Jubilee Clip</b>       | Pinza "Jubilee"                         | Slangklämma        |
| <b>Junction</b>           | Unión                                   | Korsning           |
| <b>K</b>                  |   |                    |
| <b>Key</b>                | Tecla                                   | Nyckel             |
| <b>Key Switch</b>         | Interruptor de llave, llave de contacto | Tändningslås       |
| <b>Kerb</b>               | Borde                                   | Kantsten           |
| <b>King Pin</b>           | Pivote central                          |                    |
| <b>King Post</b>          | Palo macho                              |                    |
| <b>Kit</b>                | Juego                                   | Satts              |
| <b>Knob</b>               | Mando                                   | Knopp              |
| <b>L</b>                  |   |                    |

| English                       | Español                           | Svenska               |
|-------------------------------|-----------------------------------|-----------------------|
| label                         | Etiqueta                          | Etikett               |
| Lamp                          | Lámpara                           | Lampa                 |
| Work Lamp                     | Lámpara de trabajo                | Arbetsljus            |
| Head Lamp                     | Lámpara de cabeza                 | Strålkastare          |
| Side Lamp                     | Lámpara lateral                   | Positionsljus         |
| Lance                         | Lanza                             | Munstycke             |
| Lap Joint                     | Articulación de solape            | Fogpunkt              |
| Large                         | Grande                            | Stor                  |
| Latch                         | Pestillo                          | Regla/stänga          |
| Lead                          | Plomo, avance                     | Bly                   |
| L.E.D. (Light Emitting Diode) | LED (diodo emisor de luz)         | L.E.D diod            |
| Leash                         | Correa                            | Remm                  |
| Left                          | Izquierda                         | Vänster               |
| Left Hand Drive (LHD)         | Conducción por la izquierda (LHD) | Vänsterstyrning       |
| Leg                           | Pata                              | Ben                   |
| Length                        | Longitud                          | Längd                 |
| Lens                          | Lentes                            | Glas                  |
| Level                         | Nivel                             | Nivå                  |
| Lever                         | Palanca                           | Spak/hävstång         |
| Lid                           | Tapa                              | Lock                  |
| Lift                          | Levantar                          | Lyfta                 |
| Lifting                       | Levantamiento                     | Lyfter                |
| Light                         | Luz                               | Ljus                  |
| Side Light                    | Luz lateral                       | Sidoljus              |
| Head Light                    | Faro                              | Strålkastare          |
| Rear Light                    | Luz trasera                       | Bakljus               |
| Brake Light                   | Luz de freno                      | Bromsljus             |
| Interior Light                | Luz interior                      | Innebelysning         |
| Fog Light                     | Luz antiniebla                    | Dimmljus              |
| Linch Pin                     | Pasador con anilla abatible       |                       |
| Lining                        | Revestimiento interior            | Bromsbelägg/beklädnad |
| Link                          | Articulación                      | Länk                  |
| Linkage                       | Varillaje de mando                | Länksystem            |
| Litre                         | Litro                             | Liter                 |
| List                          | Lista                             | List                  |
| Load                          | Carga, cargar                     | Lasta                 |
| Located                       | Situado                           | Placerad              |
| Lock                          | Cierre, bloqueo                   | Lås                   |
| Locknut                       | Contratuerca                      | Läsmutter             |
| Locker                        | Taquilla                          | Skåp                  |
| Locking                       | Cierre                            | Låsa                  |
| Long                          | Largo                             | Lång                  |

| English                     | Español                | Svenska       |
|-----------------------------|------------------------|---------------|
| <b>Loom</b>                 | Cableado eléctrico     | Hölje         |
| <b>Loop</b>                 | Bucle                  | Förbinda      |
| <b>Low Pressure</b>         | Baja presión           | Lågtryck      |
| <b>Lower</b>                | Inferior, bajar        | Sänka         |
| <b>Lubricant</b>            | Lubricante             | Smörjmedel    |
| <b>Lubrication</b>          | Lubricación            | Smörjning     |
| <b>M</b>                    |                        |               |
| <b>Machine</b>              | Máquina                | Maskin        |
| <b>Magnet</b>               | Imán                   | Magnet        |
| <b>Magnetic</b>             | Magnético              | Magnetisk     |
| <b>Main</b>                 | Principal              | Huvud         |
| <b>Male</b>                 | Macho                  | Man           |
| <b>Management</b>           | Gestión                | Skötsel       |
| <b>Manifold</b>             | Distribuidor           | Fördelare     |
| <b>Manual</b>               | Manual                 | Manual        |
| <b>Manufactured</b>         | Fabricado              | Tillverkad    |
| <b>Marker Lamp</b>          | Luz de señalización    |               |
| <b>Master</b>               | Principal              | Huvud         |
| <b>Master Cylinder</b>      | Cilindro maestro       | Huvudcylinder |
| <b>Maximum (Max)</b>        | Máximo (Máx.)          | Maximum       |
| <b>Mesh</b>                 | Malla                  | Galler        |
| <b>Metal</b>                | Metal                  | Metall        |
| <b>Meter</b>                | Metro                  | Meter         |
| <b>Micro Switch</b>         | Microinterruptor       | Mikrobrytare  |
| <b>Minimum (Min)</b>        | Mínimo (Mín.)          | Minimum       |
| <b>Mirror</b>               | Espejo                 | Spegel        |
| <b>Miscellaneous</b>        | Varios                 | Ungefärlik    |
| <b>Modified</b>             | Modificado             | Modifierad    |
| <b>Module</b>               | Módulo                 | Modul         |
| <b>Monitor</b>              | Monitor, controlar     | Skärm         |
| <b>Motor</b>                | Motor                  | Motor         |
| <b>Mount</b>                | Montura                | Montera       |
| <b>Mounted</b>              | Montado                | Monterad      |
| <b>Mounting</b>             | Instalación, soporte   | Montera       |
| <b>Mud Flaps</b>            | Aleta guardabarros     | Stänkskydd    |
| <b>Mud Guard</b>            | Guardabarros           | Stänkskärm    |
| <b>Muffler</b>              | Silenciador            | Ljuddämpare   |
| <b>Multi Function</b>       | Multifunción, multiuso | Flerfunktion  |
| <b>N</b>                    |                        |               |
| <b>N/A (Not Applicable)</b> |                        |               |

| English                 | Español               | Svenska         |
|-------------------------|-----------------------|-----------------|
| <b>Narrow</b>           | Estrecho              | Nära            |
| <b>Near side</b>        | Lado izquierdo        | Nära sidan      |
| <b>Negative</b>         | Negativo              | Negativ         |
| <b>Neutral</b>          | Neutral, punto muerto | Neutral         |
| <b>New</b>              | Nuevo                 | Ny              |
| <b>Nipple</b>           | Manguito              | Nippel          |
| <b>No. (Number)</b>     | Número                | Nummer          |
| <b>Non Return</b>       | Sin retorno           | Ingen återvändo |
| <b>Normal</b>           | Normal                | Normal          |
| <b>Note</b>             | Nota                  | Not             |
| <b>Nozzle</b>           | Boquilla              | Munstycke       |
| <b>Number</b>           | Número                | Nummer          |
| <b>Numerical</b>        | Numérico              | Numrerad        |
| <b>Nut</b>              | Tuerca                | Mutter          |
| <b>Nyloc Nut</b>        | Tuerca "Nyloc"        | Nylocmutter     |
| <b>Hex Nut</b>          | Tuerca hexagonal      | Mutter sexkant  |
| <b>Plain Nut</b>        | Tuerca lisa           | Plan mutter     |
| <b>Self Locking Nut</b> | Tuerca autoblocante   | Låsmutter       |
| <b>Thin Nut</b>         | Tuerca fina           | Mutter (tunn)   |
| <b>Nylon Tube</b>       | Tubo de nilón         | Nylonslang      |

## O

|                       |                    |                  |
|-----------------------|--------------------|------------------|
| <b>Obsolete</b>       | Obsoleto           | Föråldrad        |
| <b>Off</b>            | Apagado            | Av               |
| <b>Off Side</b>       | Lado derecho       | Vid sidan av     |
| <b>Oil</b>            | Aceite             | Olja             |
| <b>Olive</b>          | Oliva              | Oliv             |
| <b>On</b>             | Encendido          | På               |
| <b>Open</b>           | Abrir              | Öppen            |
| <b>Opened</b>         | Abierto            | Öppnad           |
| <b>Opening</b>        | Apertura, abertura | Öppning          |
| <b>Operating</b>      | Funcionamiento     | Köra             |
| <b>Option</b>         | Opción             | Tillbehör        |
| <b>Optional</b>       | Opcional           | Valfri/frivillig |
| <b>Orange</b>         | Naranja            | Orange           |
| <b>Original</b>       | Original           | Orginal          |
| <b>O Ring</b>         | Junta tórica       | O ring           |
| <b>Out (Extended)</b> | Fuera              |                  |
| <b>Outer</b>          | Exterior           | Yttre            |
| <b>Outlet</b>         | Salida             | Överskott        |
| <b>Output</b>         | Producción         | Utkommande       |
| <b>Overhead</b>       | En cabeza          | Över huvudet     |

| English                         | Español                        | Svenska          |
|---------------------------------|--------------------------------|------------------|
| <b>Overload</b>                 | Sobrecarga                     | Överlasta        |
| <b>P</b>                        |                                |                  |
| <b>Packer</b>                   | Tapón estanco                  | Packare          |
| <b>Panel</b>                    | Panel                          | Panel            |
| <b>Part</b>                     | Pieza                          | Del              |
| <b>Pedal</b>                    | Pedal                          | Pedal            |
| <b>Pick-up (sensor)</b>         | Elegir                         | Sensor           |
| <b>Pilot (pressure)</b>         | Piloto                         | Pilot (tryck)    |
| <b>Pin</b>                      | Pasador                        | Pinne            |
| <b>Pinion</b>                   | Piñón                          | Pinjong          |
| <b>Pink</b>                     | Rosa                           | Rosa             |
| <b>Pipe</b>                     | Tubo (rígidio)                 | Rör              |
| <b>Piping</b>                   | Tubería                        | Rördragning      |
| <b>Piston</b>                   | Pistón                         | Kolv             |
| <b>Pivot</b>                    | Pivote                         | Styrtapp         |
| <b>Plastic</b>                  | Plástico                       | Plast            |
| <b>Plate</b>                    | Disco, placa                   | Tallrik          |
| <b>Plinth</b>                   | Base                           | Plint            |
| <b>Plug</b>                     | Enchufe, tapón                 | Plugg            |
| <b>Point</b>                    | Punto                          | Punkt            |
| <b>Poppet Valve</b>             | Válvula de resorte             |                  |
| <b>Ports</b>                    | Puertos                        | Port/öppning     |
| <b>Position</b>                 | Posición                       | Position         |
| <b>Positioned</b>               | Colocado                       | Placerad         |
| <b>Post</b>                     | Poste, borna                   | Stolpe/stötta    |
| <b>Potentiometer</b>            | Potenciómetro                  | Potensiometer    |
| <b>Power</b>                    | Potencia                       | Ström            |
| <b>Pneumatic (See Also Air)</b> | Neumático (véase también Aire) | Pneumatisk       |
| <b>Pressure</b>                 | Presión                        | Tryck            |
| <b>Primer</b>                   | Cebador                        | Primer           |
| <b>Production</b>               | Producción                     | Produktion       |
| <b>Prop</b>                     | Apoyo                          | Stöd/palla under |
| <b>Propshaft</b>                | Árbol de transmisión           | Kardanaxel       |
| <b>Pull</b>                     | Tirar, tracción                | Drag             |
| <b>Pulley</b>                   | Polea                          | Remskiva         |
| <b>Pulsation</b>                | Pulsación                      | Pulserande       |
| <b>Pulse</b>                    | Pulso                          | Puls             |
| <b>Pump</b>                     | Bomba                          | Pump             |
| <b>Purple</b>                   | Púrpura                        | Lila             |
| <b>Push</b>                     | Empujar, empuje                | Tryck            |

| English                | Español                         | Svenska          |
|------------------------|---------------------------------|------------------|
| <b>Q</b>               |                                 |                  |
| Quick Release          | Suelta rápida                   | Snabbkoppling    |
| <b>R</b>               |                                 |                  |
| Radiator (Rad.)        | Radiador (Rad.)                 | Kylare           |
| Raise                  | Levantar                        | Lyfta            |
| Raised                 | Levantado                       | Lyft             |
| Ram                    | Pistón                          | Kolv             |
| Ratio                  | Relación                        | Radie            |
| Rear                   | Trasero                         | Bak              |
| Red                    | Rojo                            | Röd              |
| Reducer                | Reducor                         | Reducerare       |
| Reducing               | Reducción, reduciendo           | Reducera         |
| Reduction              | Reducción                       | Reducering       |
| Reel                   | Carrete                         | Hjul             |
| Refer                  | Ver                             | Referera         |
| Refill                 | Rellenar                        | Återfylla        |
| Regulator              | Regulador                       | Regulator        |
| Related                | Relacionado                     | Besläktad        |
| Relay                  | Relé                            | Relä             |
| Release                | Liberación                      | Lösgöra          |
| Relief Valve           | Válvula de descarga             | Övertrycksventil |
| Remote                 | Remoto                          | Mottagare        |
| Repair                 | Reparar                         | Reparera         |
| Replacement            | Sustitución                     | Ersätta          |
| Resister               | Registrar, registro             | Motstånd         |
| Restrictor             | Estrangulador                   | Strympning       |
| Retainer               | Fiador                          | Förskottshyra    |
| Retaining              | Retención                       |                  |
| Return                 | Retorno                         | Återvända        |
| Reverse                | Inverso                         | Backa            |
| Reversing              | Inversión                       | Backa            |
| Right                  | Derecha                         | Höger            |
| Right Hand Drive (RHD) | Conducción por la derecha (RHD) | Högerstyrd       |
| Rim                    | Llanta                          | Kant/fals        |
| Ring                   | Anillo                          | Ring             |
| Road                   | Carretera                       | Väg              |
| Rod                    | Varilla                         | Rulle            |
| Rolling                | Rodamiento                      | Rullande         |
| Rotary                 | Giratorio, rotativo             | Roterande        |

| English                           | Español                         | Svenska                |
|-----------------------------------|---------------------------------|------------------------|
| <b>Rotate</b>                     | Girar                           | Rotera                 |
| <b>Rotating</b>                   | Giratorio, rotativo             | Rotera                 |
| <b>Rotation</b>                   | Giro                            | Rotation               |
| <b>Rubber</b>                     | Goma                            | Gummi                  |
| <b>S</b>                          |                                 |                        |
| <b>Safety</b>                     | Seguridad                       | Säkerhet               |
| <b>Scraper</b>                    | Escariador                      | Skrapa                 |
| <b>Screen</b>                     | Filtro, pantalla                | Galler                 |
| <b>Screw</b>                      | Tornillo                        | Skruv                  |
| <b>csk hd (counter-sunk head)</b> | Cab. avell. (cabeza avellanada) |                        |
| <b>Hex hd (hexagonal head)</b>    | Cab. hexag. (cabeza hexagonal)  | Skruv sexkant          |
| <b>skt hd (socket head)</b>       | Cab. hueca (cabeza hueca)       | Skruv (fösänkt)        |
| <b>Seal</b>                       | Junta                           | Tätning                |
| <b>Sealant</b>                    | Sellante                        | Flytande tätningsmedel |
| <b>Sealing</b>                    | Sellado                         | Täta                   |
| <b>Seat</b>                       | Asiento                         | Säte                   |
| <b>Securing</b>                   | Fijación                        | Säkra                  |
| <b>Selector Shaft</b>             | Eje selector                    | Väljaraxel             |
| <b>Self Tapping</b>               | Aterrajado automático           | Självdränerande        |
| <b>Sender</b>                     | Conmutador selector             | Sändare                |
| <b>Sensor</b>                     | Sensor                          | Sensor                 |
| <b>Separation</b>                 | Separación                      | Separerat              |
| <b>Serial</b>                     | Serie                           | Serie                  |
| <b>Service Exchange (S/EX)</b>    | Intercambio de servicio         | Utbytesdel             |
| <b>Setscrew</b>                   | Tornillo de fijación            | Sättskruv              |
| <b>Shaft</b>                      | Eje                             | Skaft                  |
| <b>Shells</b>                     | Cuerpos                         | Snäckor                |
| <b>Shield</b>                     | Protector                       | Skjöld                 |
| <b>Shim</b>                       | Suplemento                      | Shims                  |
| <b>Shock Absorber</b>             | Amortiguador                    | Stötdämpare            |
| <b>Shoe</b>                       | Zapata                          | Sko                    |
| <b>Short</b>                      | Corto                           | Kort                   |
| <b>Shovel</b>                     | Pala                            | Skyffel                |
| <b>Side Access Door</b>           | Puerta de acceso lateral        | Sidodörr               |
| <b>Sight</b>                      | Vista                           | Sikt                   |
| <b>Silencer</b>                   | Silenciador                     | Ljuddämpare            |
| <b>Silicon</b>                    | Silicona                        | Silikon                |
| <b>Single</b>                     | Único, sencillo                 | Enkel                  |
| <b>Skirt</b>                      | Faldón                          | Kjol                   |
| <b>Slate</b>                      | Pizarra                         |                        |

| English            | Español                | Svenska            |
|--------------------|------------------------|--------------------|
| <b>Sleeve</b>      | Manguito               | Muff               |
| <b>Slew</b>        | Pivolar                | Svänga/slira       |
| <b>Slewing</b>     | Pivotaje               | Svängande/slirande |
| <b>Sliding</b>     | Deslizamiento          | Glidande           |
| <b>Slotted</b>     | Ranurado               | Spräckt            |
| <b>Small</b>       | Pequeño                | Liten              |
| <b>Socket</b>      | Casquillo              | Sockel             |
| <b>Solenoid</b>    | Solenóide              | Solenoid           |
| <b>Spacer</b>      | Separador              | Distans            |
| <b>Spare</b>       | Repuesto               | Reserv             |
| <b>Speakers</b>    | Altavoces              | Högtalare          |
| <b>Special</b>     | Especial               | Special            |
| <b>Speed</b>       | Velocidad              | Fart               |
| <b>Spherical</b>   | Esférico               | Klotformig         |
| <b>Spigot</b>      | Espiga                 | Rör                |
| <b>Spindle</b>     | Husillo                | Spindel            |
| <b>Splined</b>     | Acanalado              | Flisad/splittrad   |
| <b>Splinter</b>    | Partícula              | Skärva/splitter    |
| <b>Split Pin</b>   | Chaveta hendida        | Låspinne           |
| <b>Splitter</b>    | Separador              | Fördelare          |
| <b>Spray</b>       | Pulverizador, rociador | Spaya              |
| <b>Spring</b>      | Muelle                 | Fjäder             |
| <b>Stabiliser</b>  | Estabilizador          | Stabilisera        |
| <b>Stabilising</b> | Estabilización         | Stabilisera        |
| <b>Stack</b>       | Pila                   | Fullpropad med     |
| <b>Standard</b>    | Estándar               | Standard           |
| <b>Standpipe</b>   | Tubo vertical          | Vattenpost         |
| <b>Starter</b>     | Motor de arranque      | Startmotor         |
| <b>Steel</b>       | Acero                  | Stål               |
| <b>Steering</b>    | Dirección              | Styrning           |
| <b>Stem</b>        | Vástago                | Stoppa             |
| <b>Stiffener</b>   | Contrafuerte, larguero | Förtjockare        |
| <b>Stop</b>        | Parar                  | Stopp              |
| <b>Storage</b>     | Almacenamiento         | Lagra              |
| <b>Stowage</b>     | Estiba                 | Stuvningsutrymme   |
| <b>Straight</b>    | Recto                  | Rakt               |
| <b>Strap</b>       | Tira de sujeción       | Sätta fast         |
| <b>Strip</b>       | Banda                  | Ta bort            |
| <b>Strut</b>       | Puntal                 | Balk/stötta        |
| <b>Stub</b>        | Tope                   | Stump/talong       |
| <b>Stud</b>        | Espárrago              |                    |
| <b>Studded</b>     | Con pasador            |                    |

| English               | Español               | Svenska          |
|-----------------------|-----------------------|------------------|
| <b>Studding</b>       | Pasante               |                  |
| <b>Sub Frame</b>      | Bastidor auxiliar     | Underram         |
| <b>Suction Box</b>    | Caja de succión       |                  |
| <b>Suction Fan</b>    | Ventilador de succión | Sugfläkt(turbin) |
| <b>Suction Nozzle</b> | Boquilla de succión   | Sugmunstycke     |
| <b>Sump</b>           | Sumidero              | Oljetråg         |
| <b>Supply</b>         | Suministro            | Förse            |
| <b>Support</b>        | Asistencia, soporte   | Stödja           |
| <b>Suppression</b>    | Supresión             | Undertryck       |
| <b>Suspension</b>     | Suspensión            | Fjädring         |
| <b>Sweep</b>          | Barrido               | Sopa             |
| <b>Sweeping</b>       | Barrido, barriendo    | Sopa             |
| <b>Swing</b>          | Oscilación            | Svängna          |
| <b>Switch</b>         | Interruptor           | Brytare          |
| <b>Switches</b>       | Interruptores         | Brytare          |
| <b>Swivel</b>         | Giratorio             | Svängbar         |
| <b>System</b>         | Sistema               | System           |

## T

|                            |   |                  |
|----------------------------|---|------------------|
| <b>Tab Washer</b>          | Arandela con lengüeta                             |                  |
| <b>Tachograph</b>          | Tacógrafo   | Färdskrivare     |
| <b>Tachometer</b>          | Tacómetro   | Hastighetsmätare |
| <b>Tandem</b>              | Tándem  | Tandem           |
| <b>Tank</b>                | Tanque  | Tank             |
| <b>Tapered</b>             | Cónico  | Avsmalnande      |
| <b>Taper Lock</b>          | Cierre cónico                                     | Plugg            |
| <b>Tee Key</b>             | Llave en T  | Gren             |
| <b>Temperature (Temp.)</b> | Temperatura (Temp.)                               | Tempratur        |
| <b>Template</b>            | Plantilla   | Mall             |
| <b>Tensioner</b>           | Tensor  | Sträckare        |
| <b>Terminal</b>            | Terminal  | Terminal         |
| <b>Test</b>                | Prueba  | Test             |
| <b>Thermostat</b>          | Termostato  | Termostat        |
| <b>Thick</b>               | Espeso  | Tjock            |
| <b>Thimble</b>             | Dedal   | Fingerborg       |
| <b>Thin</b>                | Delgado   | Smal             |
| <b>Throttle</b>            | Regulador de gases                                | Trottel          |
| <b>Thrust</b>              | Empuje  | Tryck            |
| <b>Tie Rod</b>             | Barra de acoplamiento transversal de la dirección |                  |
| <b>Tilt</b>                | Inclinlar   | Tilt             |
| <b>Tilting</b>             | Inclinación                                       | Tilta            |

# Multi-lingual glossary



| English                     | Español                                      | Svenska            |
|-----------------------------|--|--------------------|
| <b>Timer</b>                | Temporizador                                 | Timer              |
| <b>Timing</b>               | Sincronización                               | Tids anpassa       |
| <b>Toggle</b>               | Báscula                                      | Vippa              |
| <b>Tool</b>                 | Herramienta                                  | Verktyg            |
| <b>Toolbox</b>              | Caja de herramientas                         | Verktygslåda       |
| <b>Toothed</b>              | Dentado                                      | Signalhorn         |
| <b>Top</b>                  | Superior                                     | Topp               |
| <b>Tow</b>                  | Remolque                                     | Dra / bogsera      |
| <b>Tow Ball</b>             | Bola de remolque                             | Dragkula           |
| <b>Tow Bar</b>              | Barra de remolque                            | Dragkrok           |
| <b>Tow Point</b>            | Punto de remolque                            | Dragpunkt          |
| <b>Track Rod</b>            | Tirante transversal                          |                    |
| <b>Trailer</b>              | Remolque                                     | Släp               |
| <b>Transfer Gearbox</b>     | Caja de cambios transferencia, caja transfer | Tillsattnväxellåda |
| <b>Transmission</b>         | Transmisión                                  | Transmission       |
| <b>Travel</b>               | Recorrido, viaje                             | Resa               |
| <b>Trunking</b>             | Unión  |                    |
| <b>Trunnion</b>             | Muñón  |                    |
| <b>Tube</b>                 | Tubo   | Rör                |
| <b>Tubing</b>               | Sistema de tuberías                          | Rördragning        |
| <b>Turbocharger (Turbo)</b> | Turbocompresor (Turbo)                       | Turbo              |
| <b>Twin</b>                 | Gemelo, bimotor                              | Dubbel             |
| <b>Type</b>                 | Tipo   | Typ                |
| <b>Typical</b>              | Típico                                       | Typisk             |
| <b>Tyre</b>                 | Neumático                                    | Däck               |

## U

|                              |                       |              |
|------------------------------|-----------------------|--------------|
| <b>Uncompressed</b>          | No comprimido         | Okomprimerad |
| <b>Underside</b>             | Inferior              | Undersida    |
| <b>Universal Joint (U/J)</b> | Junta cardánica (U/J) | Knutkors     |
| <b>Union</b>                 | Unión                 | Förena       |
| <b>Unit</b>                  | Unidad                | Del          |
| <b>Un-Loader</b>             | Descargador           | Avlastning   |
| <b>Up</b>                    | Arriba                | Upp          |
| <b>Update</b>                | Actualizar            | Uppdatera    |
| <b>Usage</b>                 | Uso                   | Andvändning  |

## V

|                |          |         |
|----------------|----------|---------|
| <b>Valve</b>   | Válvula  | Ventil  |
| <b>Variant</b> | Variante | Variant |
| <b>Vehicle</b> | Vehículo | Fordon  |

| English   | Español   | Svenska  |
|---|---|--|
| <b>Voltage</b>  | Tensión   | Volt   |
| <b>W</b>  |   |  |
| <b>Wander Hose</b>  | Tubo flexible móvil   | Sugslang (lövsug)  |
| <b>Warning</b>  | Advertencia   | Varning  |
| <b>Washer</b>   | Arandela  | Bricka   |
| <b>Water</b>  | Agua  | Vatten   |
| <b>Wear</b>   | Desgaste  | Slitage  |
| <b>Weed Ripper</b>  | Escardador  | Ogräs  |
| <b>Welded</b>   | Soldado   | Svetsad  |
| <b>Wheel</b>  | Rueda   | Hjul   |
| <b>White</b>  | Blanco  | Vit  |
| <b>Wide Sweep</b>   | Barrido amplio  | Vals   |
| <b>Windscreen</b>   | Parabrisas  | Vindruta   |
| <b>Wiper</b>  | Limpiaparabrisas  | Torkare  |
| <b>Wires</b>  | Cables  | Ledningar  |
| <b>Wiring</b>   | Cableado  | Ledningsdragning   |
| <b>Black,</b><br><b>Blue,</b><br><b>Brown,</b><br><b>Green,</b><br><b>Grey,</b><br><b>Orange,</b><br><b>Pink,</b><br><b>Purple,</b><br><b>Red,</b><br><b>White</b><br><b>Yellow</b> | Negro,<br>Azul,<br>Marrón,<br>Verde,<br>Gris,<br>Naranja,<br>Rosa,<br>Púrpura,<br>Rojo,<br>Blanco<br>Amarillo | Svart<br>Blå<br>Brun<br>Grön<br>Grå<br>Orange<br>Rosa<br>Lila<br>Röd<br>Vit<br>Gul |
| <b>Work Light</b>   | Lámpara de trabajo  | Arbetsljus   |
| <b>X</b>  |   |  |
| <b>Xenon</b>  | Xenón   | Xenon  |
| <b>Y</b>  |   |  |
| <b>Yellow</b>   | Amarillo  | Gul  |
| <b>Yoke</b>   | Horquilla   | Sammankoppla   |





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